## **REFERENCES**

American Concrete Institute (1996), *State-of-the-art Report on Fiber Reinforced Plastic Reinforcement for Concrete Structures*, ACI Report 440R-96, Detroit, Michigan.

American Concrete Institute (2002), Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, ACI Report 440.2R-02, Detroit, Michigan.

Antonopoulos, K. (2001), Strengthening of RC Beam-Column Joints with FRP Materials, Ph.D. Dissertation, University of Patras, Department of Civil Engineering (in Greek).

Ahmad, S. H. and Plecnik, J. M. (1989), *Transfer of Composites Technology to Design and Construction of Bridges*, Report of the California State University.

Antonopoulos, C. P. and Triantafillou, T. C. (2002), "Analysis of FRP-Strengthened RC Beam-Column Joints", *Journal of Composites for Construction, ASCE*, 6(1), 41-51.

Antonopoulos, C. P. and Triantafillou, T. C. (2003), "Experimental Investigation of FRP-Strengthened RC Beam-Column Joints", *Journal of Composites for Construction, ASCE*, 7(1), 39-49.

Barnes, R. A. and Mays, G. C. (1999), "Fatigue performance of concrete beams strengthened with CFRP plates", *Journal of Composites for Construction, ASCE*, 3(2), 63-72.

Bizindavyi, L. and Neale, K. W. (1999), "Transfer lengths and bond strengths for composites bonded to concrete", *Journal of Composites for Construction, ASCE*, 3(4), 153-160.

Blaschko M., Nierdermeier R. and Zilch, K. (1998), "Bond failure modes of flexural members strengthened with FRP", *Proceedings of Second International Conference on Composites in Infrastructures*, Saadatmanesh, H. and Ehsani, M. R., eds., Tucson, Arizona, 315-327.

Brosens, K. and Van Gemert, D. (1999), "Anchorage design for externally bonded carbon fiber reinforced polymer laminates", *Proceedings of Fourth International Symposium on FRP Reinforcement for Concrete Structures*, Baltimore, USA, 635-645.

Business Communications Co., Inc. (2002), Internal Report.

Campione, G. and Miraglia, N. (2003), "Strength and strain capacities of concrete compression members reinforced with FRP", *Cement and Concrete Composites*, 25, 31-41.

Deuring, M. (1993), Strengthening of RC with Prestressed Fiber Reinforced Plastic Sheets. EMPA Research Report 224, Dübendorf, Switzerland (in German).

Eurocode 6: Design of Masonry Structures – Part 1-1: Common Rules for Reinforced and Unreinforced Masonry Structures, EN 1996-1-1:2005.

Eurocode 8: Design of Structures for Earthquake Resistance – Part 3: Assessment and Retrofitting of Buildings, EN 1998-3:2005.

Greek Seismic Design Code – EAK (2000), Earthquake Planning and Protection Organization, Athens.

Feldman, D. (1989), *Polymeric Building Materials*, Elsevier Science Publishers Ltd., UK.

Federation International du Beton – *fib* (2001), *Externally Bonded FRP Reinforcement for RC Structures*, Bulletin 14, Lausanne.

Federation International du Beton – fib (2003), Seismic Assessment and Retrofit of Reinforced Concrete Buildings, Bulletin 24, Lausanne.

Haroun, M. A., Mosallam, A. S., Feng, M. Q. and Elsanedeby L. L. (2001) "Experimental investigation of seismic repair and retrofit of bridge columns by composite jackets", *Proceedings of the International Conference of FRP composites in Civil Engineering*, J.-G. Teng, ed., Hong Kong, 839-848.

Holzenkämpfer, P. (1994), *Ingenieurmodelle des verbundes geklebter bewehrung für betonbauteile*. Dissertation, TU Braunschweig (In German).

Jansze, W. (1997), Strengthening of Reinforced Concrete Members in Bending by Externally Bonded Steel Plates, PhD Dissertation, TU Delft, The Netherlands.

Japan Building Disaster Prevention Association (1999), Seismic Retrofit Design and Construction Guidelines for Existing Reinforced Concrete Buildings and Steel Encased Reinforced Concrete Buildings Using Continuous Fiber Reinforced Materials, Ed. by the Building Guidance Division, Housing Bureau, Japan Ministry of Construction.

Japan Society of Civil Engineers (2001), Recommendations for Upgrading of Concrete Structures with use of Continuous Fiber Sheets, Concrete Engineering Series 41.

Karantzikis, M., Papanicolaou, C. G, Antonopoulos, C. P. and Triantafillou, T. C. (2005), "Experimental Investigation of Non-Conventional Confinement for Concrete using FRP", *Journal of Composites for Construction, ASCE*, 9(6), 480-487.

Kaiser, H. (1989), *Strengthening of Reinforced Concrete with CFRP Plates*, Ph.D. Dissertation, ETH Zürich (in German).

Kim, D.-H. (1995), *Composite Structures for Civil and Architectural Engineering*, E & FN Spon, London.

Krevaikas, T. D. and Triantafillou, T. C. (2005), "Masonry confinement with fiber reinforced polymers", *Journal of Composites for Construction, ASCE*, 9(2), 128-135.

KANEPE (2005), *Code for Interventions*, 2<sup>nd</sup> Draft, Earthquake Planning and Protection Organization, Athens.

Lam, L., and Teng, J. G. (2003), "Stress-strain model for FRP-confined concrete for design applications", *Proceedings of 6<sup>th</sup> International Symposium on Fibre-Reinforced Polymer (FRP) Reinforcement for Concrete Structures*, Ed. K. H. Tan, Singapore, 1, 99-110.

Lamanna, A. J., Bank, L. C. and Scott, D. W. (2001), "Flexural strengthening of RC beams using fasteners and FRP strips", *Journal of Composites for Construction, ASCE*, 8(3), 203-210.

Ma, R. and Xiao, Y. (1997), "Seismic retrofit and repair of circular bridge columns with advanced composite materials", *Earthquake Spectra*, 15(4), 747-764.

Matthys, S. (2000), Structural Behaviour and Design of Concrete Members Strengthened with Externally Bonded FRP Reinforcement, Doctoral Thesis, Ghent University.

Moehle, J., Lynn, A., Elwood, K. and Sezen, H. (2001), *Gravity Load Collapse of Building Frames During Earthquakes*, PEER Report: 2<sup>nd</sup> US-Japan Workshop on Performance-based Design Methodology for Reinforced Concrete Building Structures, PEER Center, Richmont, CA.

Monti, G., Santinelli, F. and Liotta, M. A. (2004), "Shear strengthening of beams with composite materials", *Proceedings of the International Conference on FRP Composites in Civil Engineering – CICE 2004*, Ed. R. Seracino, Adelaide, Australia, 569-577.

Neubauer, U. and Rostásy, F. S. (1999), "Bond failure of concrete fibre reinforced polymer at inclined cracks – experiments and fracture mechanics model", *Proceedings of the 4<sup>th</sup> International Conference on Fibre Reinforced Polymer Reinforcement for Concrete Structures*, Eds. C. W. Dolan, S. H. Rizkalla and A., Nanni, ACI, Michigan, USA, 369-382.

Oehlers, D. J. (1992), "Reinforced concrete beams with plates glued to their soffits", *Journal of Structural Engineering, ASCE*, 118(8), 2023-2038.

Osada, K., Yamaguchi, T. and Ikeda, S. (1999), "Seismic performance and the retrofit of hollow circular reinforced concrete piers having reinforcement cut-off planes and variable wall thickness", *Transactions of the Japan Concrete Institute*, 21, 263-274.

Plevris, N. and Triantafillou, T. C. (1994), "Time-dependent behaviour of RC members strengthened with FRP laminates", *Journal of Structural Engineering, ASCE*, 120(3), 1016-1042.

Priestley, M. J. N., Seible, F. and Calvi, G. M. (1996), *Seismic Design and Retrofit of Bridges*, John Wiley & Sons, New York, USA.

Raoof, M. and Hassanen, M. A. H. (2000), "Peeling failure of reinforced concrete beams with fibre-reinforced plastic or steel plates glued to their soffits", *Proceedings of the Institution of Civil Engineers: Structures and Buildings*, 140, 291-305.

Restrepo, J. I., Wang, Y. C., Irwin, R. W. and DeVino, B. (1988) "Fibreglass/epoxy composites for the seismic upgrading of reinforced concrete beams with shear and bar

curtailment deficiencies", *Proceedings 8<sup>th</sup> European Conference on Composite Materials*, Naples, Italy, 59-66.

Saadatmanesh, H., Ehsani, M. R. and Jin, L. (1997) "Repair of earthquake-damaged RC columns with FRP wraps", *ACI Structural Journal*, 94(2), 206-215.

Seible, F., Priestley, M. J. N., Hegemier, G. A. and Innamorato, D. (1997) "Seismic retrofit of RC columns with continuous carbon fiber jackets", *Journal of Composites for Construction, ASCE*, 1(2), 52-62.

Structural Plastics Institute (2005), Verbal communication.

Tastani, S. and Pantazopoulou, S. (2002), "Design of seismic strengthening for brittle RC members using FRP jackets", *Proceedings of 12<sup>th</sup> European Conference on Earthquake Engineering*, London, Paper 360.

Teng, J. G.; Chen, J. F.; Smith, S. T. and Lam, L. (2001), FRP Strengthened RC Structures, John Wiley & Sons Inc.

Triantafillou, T. C. (1998), "Shear strengthening of reinforced concrete beams using epoxy-bonded FRP composites", *ACI Structural Journal*, 95(2), 107-115.

Triantafillou, T. C. (1998), "Strengthening of masonry structures using epoxy-bonded FRP laminates", *Journal of Composites for Construction, ASCE*, 2(2), 96-104.

Triantafillou, T. C. (2006), Structural Materials, Papasotiriou Bookstores (in Greek).

Triantafillou, T. C. and Deskovic, N. (1991), "Innovative prestressing with FRP sheets: mechanics of short-term behavior", *Journal of Engineering Mechanics, ASCE*, 117(7), 1652-1672.

Triantafillou, T. C. and Fardis, M. N. (1997), "Strengthening of historic masonry structures with composite materials", *Materials and Structures, RILEM,* 30, 486-496.

Triantafillou, T. C., Papanicolaou, C. G., Zissimopoulos, P. and Laourdekis, T. (2006), "Concrete confinement with textile reinforced mortar (TRM) jackets", *ACI Structural Journal*, 103(1), 28-37.

Triantafillou, T. C. and Papanicolaou, C. G. (2006). "Shear strengthening of RC members with textile reinforced mortar (TRM) jackets", *Materials and Structures, RILEM*, 39(1), 85-93.

Triantafillou, T. C. and Plevris, N. (1992), "Strengthening of RC beams with epoxybonded fibre-composite materials", *Materials and Structures*, 25, 201-211.

Yamaguchi, T., Nishimura, T., and Uomoto, T. (1998), "Creep model of FRP rods based on fibre damaging rate", *Proceedings of 1<sup>st</sup> International Conference on Durability of Fibre Reinforced Polymer (FRP) Composites for Construction*, Eds. B. Benmokrane and H. Rahman, Sherbrooke, Canada, 427-437.

YPEXODE (2000), Greek Code for the Design of Reinforced Concrete Structures, EKOS – 2000.

Zilch, K., Niedermeier, R. and Blaschko, M. (1998), *Bericht über versuche zum verstärken von betonbauteilen mit CFK (Test report on retrofitting concrete members with CFRP*). Versuchsbericht Nr. 1310, Technische Universität München, Lehrstuhl für Massivbau (In German).

Ziraba, Y. N., Baluch, M. H., Basunbul, I. A., Sharif, A. M., Azad, A. K. and Al-Sulaimani, G. J. (1994), "Guidelines towards the design of reinforced concrete beams with external plates", *ACI Structural Journal*, 91(6), 639-646.