

# Curriculum Vitae

Prof. Amorn Pimanmas, Ph.D.



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## 1. Education

- B.Eng. (1st Class Honors, Gold Medal) in Civil Engineering, Chulalongkorn University, Thailand
- M.Eng. (Civil Engineering), University of Tokyo, Japan
- Master of Management, Mahidol University
- Ph.D. (Civil Engineering), University of Tokyo, Japan

## 2. Training Courses

- Director Certification Program DCP275/2019 Thai Institute of Directors
- Strategic Board Master Class SBM6/2019 Thai Institute of Directors
- Risk for Corporate Leaders RCL16/2019 Thai Institute of Directors
- Financial Statement for Directors FSD39/2019 Thai Institute of Directors
- Advanced Audit Committee Program AACP34/2019 Thai Institute of Directors
- IT Governance and Cyber Resilience program ITG13/2020, Thai Institute of Directors

## 3. Other positions

- Senior professional Engineers ๓๒.1800
- Professor (with higher positional allowances, equivalent to C11) of Civil Engineering, Kasetsart University
- President, Thailand Structural Engineers Association
- Member of Academic Council, Rajamangala University of Technology Phra Nakhon

- Committee member, Thai Technical Volunteer Foundation

#### 4. Specialization

Structural Engineering, Concrete Engineering, Civil Engineering, Earthquake Engineering, Bridge Engineering, Buildings, Infrastructures, Transportation

#### 5. Publications

##### 5.1 Textbooks (English):

1. Koichi Maekawa, Amorn Pimanmas, Hajime Okamura (2003). Nonlinear Mechanics of Reinforced Concrete, SPON press, 721 pp.
2. Ekasit Limsuwan and Amorn Pimanmas, (2013). Handbook of International Bridge Engineering, CRC Press (Book chapter) (Eds: Wai Fah Chen)

##### 5.2 Thai text books more than 40 books

##### 5.3 International Journal Publications

1. Ekkachai Yooprasertchai, Pongsak Wiwatrojanagul, Amorn Pimanmas, A use of natural sisal and jute fiber composites for seismic retrofitting of nonductile rectangular reinforced concrete columns, Journal of Building Engineering, Vol.52, APR2022.
2. Lalin Lam, Arslan Qayyum Khan, Amorn Pimanmas, Shear strengthening of RC deep beams using glass chopped strand mat (GCSM) composite, Case Studies in Construction Materials, Vol.16, MAR2022
3. Seyha Yinh, Qudeer Hussain, Panuwat Joyklad, Preeda Chaimahawan, Winyu Rattanapitikon, Suchart Limkatanyu, Amorn Pimanmas, Strengthening effect of natural fiber reinforced polymer composites (NFRP) on concrete, Case Studies in Construction Materials, Vol.15, AUG2021
4. Shazad Saleem, Amorn Pimanmas, Muhammad Irshad Qureshi and Winyu Rattanapitikon, Axial Behavior of PET FRP-Confined Reinforced Concrete, ASCE's Journal of Composites for Construction, Vol.25(1), FEB2021.
5. Amorn Pimanmas, Ekkachai Yooprasertchai and Pongsak Wiwatrojanagul, Cyclic loading Test of Precast Concrete Load bearing walls designed for Gravity loading, *Magazine of Concrete Research* (2019), <https://doi.org/10.1680/jmacr.19.00347>.

6. Amorn Pimanmas and Shahzad Saleem, Evaluation of Existing Stress-Strain Models and Modeling of PET FRP-Confined Concrete, *ASCE Journal of Materials in Civil Engineering* (2019), Vol.31(12), pp.1-41.
7. Sakol Suon, Shahzad Saleem and Amorn Pimanmas, Compressive behavior of basalt FRP confined circular and non-circular concrete specimens, *Construction and Building Materials*, Vol. 195, 2019, pp.85-103.
8. Sanyawit Siriluk, Qudeer Hussin, Winyu Rattanapitikon and Amorn Pimanmas, Behavior of RC deep beams strengthened in shear using hemp fiber reinforced polymer composites, *International Journal of Geomate*, Vol. 15(47), July 2018, pp. 89-94.
9. Amorn Pimanmas, Axial strength and deformability of concrete confined with natural fiber reinforced polymers (NFRP), *Magazine of Concrete Research*, Vol. 71(2) Feb 2018, 55-70.
10. Amorn Pimanmas and Shahzad Saleem, Dilation characteristics of PET FRP confined concrete, *ASCE Journal of Composites for Construction* (Accepted for publication, In Print), 2018.
11. Shahzad Saleem; Amorn Pimanmas and Winyu Rattanapitikon, Lateral response of PET FRP-confined Concrete, *Construction and Building Materials*, Vol. 159, January 2018, pp.390-407.
12. Shahzad Saleem; Qudeer Hussain; and Amorn Pimanmas, Compressive Behavior of PET FRP-Confined Circular, Square and Rectangular Concrete Columns, *ASCE's Journal of Composites for Construction*, Vol. 21, No.3, 2017, pp.
13. Pragasit Juntanalikit; Tidarut Jirawattanasomkul; and Amorn Pimanmas. Experimental and numerical study of strengthening non-ductile RC columns with and without lap splice by Carbon Fiber Reinforced Polymer (CFRP) Jacketing, *Engineering Structures*, Vol. 125, October 2016, pp. 400-418.
14. Hussain, Qudeer; Winyu Rattanapitikon; and Amorn Pimanmas. Axial load behavior of circular and square concrete columns confined with sprayed fiber-reinforced polymer composites, *Polymer Composites*. Vol.37, No. 8, August 2016, pp.2557-2567.
15. Hussain, Qudeer and Amorn Pimanmas (2016). Shear strengthening of RC deep beams with sprayed fibre-reinforced polymer composites (SFRP) and anchoring systems: part 1. experimental study, *European Journal of Environmental and Civil Engineering*, Vol. 20, No. 1, January 2016, pp. 79-107.
16. Hussain, Qudeer and Amorn Pimanmas (2015). Shear strengthening of RC deep beams with openings using sprayed glass fiber reinforced polymer composites (SGFRP) : part 1.

- experimental study, *KSCE Journal of Civil Engineering*, Vol. 19, No. 7, November 2015, pp. 2121-2133.
17. Hussain, Qudeer and Amorn Pimanmas (2015). Shear strengthening of RC deep beams with sprayed fiber-reinforced polymer composites (SGFRP): part 2. finite element analysis, *Latin American Journal of Solids and Structures*, Vol. 12, No. 7, pp. 1266-1295.
  18. Panuwat Joyklad, Amorn Pimanmas and Rajesh P. Dhakal (2012). Cyclic Performance of Beam-Column Joints with Extended Column Fixed at Base: Part I-Experimental Investigation, *Magazine of Concrete Research*, Vol. 64, No. 9, pp. 807-825.
  19. Panuwat Joyklad and Amorn Pimanmas. (2011). Cyclic stress development in substandard beam-column joint, *Proceedings of the ICE - Structures and Buildings*, Vol.164, No. 3, June 2011, pp. 211-225.
  20. Dam Xuan, Thai and Amorn Pimanmas (2011). Response of lap splice of reinforcing bars confined by FRP wrapping: modeling approach, *Structural Engineering and Mechanics*, Vol. 37, No. 1, January 2011, pp. 95-110.
  21. Amorn Pimanmas and Dam Xuan Thai (2011). Response of lap splice of reinforcing bars confined by FRP wrapping: application to nonlinear analysis of RC column, *Structural Engineering and Mechanics*, Vol. 37, No. 1, January 2011, pp. 111-129.
  22. Amorn Pimanmas, Panuwat Joyklad, and Pennung Warnitchai (2010). Structural design guideline for tsunami evacuation shelter, *Journal of Earthquake and Tsunami*, Vol. 4, No. 4, December 2010, pp. 269-284.
  23. Amorn Pimanmas and Preeda Chaimahawan (2010). Shear strength of beam-column joint with enlarged joint area, *Engineering Structures*, Vol. 32, No. 9, September 2010, pp. 2529-2545.
  24. Amorn Pimanmas (2010). Web crushing strength of reinforced concrete beams with pre-existing cracks, *Magazine of Concrete Research*, Vol. 62, No. 9, September 2010, pp. 665-678.
  25. Preeda Chaimahawan and Amorn Pimanmas (2010). Behavior and analysis of beam-column joint strengthened by cast-in-situ expansion, *Magazine of Concrete Research*, Vol. 62, No. 5, May 2010, pp. 347-363.
  26. Amorn Pimanmas (2010). Strengthening R/C beams with opening by externally installed FRP rods: behavior and analysis, *Composite Structures*, Vol. 92, No. 8, July 2010, pp. 1957-1976.
  27. Preeda Chaimahawan and Amorn Pimanmas (2009). Nonlinear FEM analysis of RC beam-column joint strengthened by cast in-situ joint expansion, *Journal of Advanced Concrete Technology*, Vol. 7, No. 3, October 2009, pp. 307-326.

28. Preeda Chaimahawan and Amorn Pimanmas (2009). Seismic retrofit of substandard beam-column joint by planar joint expansion, *Materials and Structures*, Vol. 42, No. 4, May 2009, pp. 443-459.
29. Amorn Pimanmas; Sittisak Imsombat; and Knut Hj. Neilsen (2009). New Phra-Nangklao bridge – a balanced cantilever prestressed concrete bridge in Thailand, *Structural Engineering International*, Vol. 19, No. 1, February 2009, pp. 38-40.
30. Amorn Pimanmas and Teeraphot Supaviriyakit (2008). Cyclic behavior of non-seismically designed interior reinforced concrete beam-column connections, *Songklanakarinn Journal of Science and Technology*, Vol. 30, No. 3, May-June 2008, pp. 323-332.
31. Teeraphot Supaviriyakit and Amorn Pimanmas (2008). Comparative performance of sub-standard interior reinforced concrete beam-column connection with various joint reinforcing details, *Materials and Structures*, Vol. 41, No. 3, April 2008, pp. 543-557.
32. Teeraphot Supaviriyakit; Amorn Pimanmas; and Pennung Warnitchai (2008). Nonlinear finite element analysis of non-seismically detailed interior RC beam-column connection under reversed cyclic load, *ScienceAsia: Journal of the Science Society of Thailand*, Vol. 34, No. 1, March 2008, pp. 49-58.
33. Theeraphot Supaviriyakit; Amorn Pimanmas; and Pennung Warnitchai (2007). Cyclic response of non-seismically detailed interior RC beam– column connection with varying column tributary area, *Magazine of Concrete Research*, Vol. 59, No. 5, June 2007, pp. 351-365.
34. Amorn Pimanmas and Jiraphong Tisavipat (2005). Effect of existing cracks on shear failure behaviour of reinforced concrete members, *Magazine of Concrete Research*, Vol. 57, No. 8, pp. 485-495.
35. Amorn Pimanmas and Phuwanat Pornpongsaroj (2004). Peeling behaviour of reinforced concrete beams strengthened with CFRP plates under various end restraint conditions, *Magazine of Concrete Research*, Vol. 56, No. 2, pp. 73-81.
36. Amorn Pimanmas and Koichi Maekawa (2003). Shear failure of reinforced concrete members subjected to pre-cracking coupled with combined axial tension and shear, *Concrete Library International*, No. 41, pp. 17-33. (Reprinted from Proceedings of JSCE, November 2001, Vol. 53, No. 690)
37. Chayanon Hansapinyo, Amorn Pimanmas, Maekawa, Koichi, and Taweep Chaisomphob. (2003). Proposed model of shear deformation of reinforced concrete beam after diagonal

- cracking, *Journal of Materials, Concrete Structures and Pavements*, JSCE, Vol. 58, No. 725, pp. 305-319.
38. Amorn Pimanmas and Koichi Maekawa (2001). Behavior and finite element analysis of pre-cracked reinforced concrete in shear, *Magazine of Concrete Research*, Vol. 53, No. 4, pp. 263-282.
  39. Amorn Pimanmas and Koichi Maekawa (2001). Influence of pre-cracking on reinforced concrete behavior in shear, *Concrete Library of JSCE* No. 38, December, pp. 207-223.
  40. Amorn Pimanmas and Koichi Maekawa (2001). Influence of pre-crack on RC behavior in shear, *J. Material. Conc. Struct., Pavements*, JSCE, Vol. 50, No. 669, pp. 227-291.
  41. Amorn Pimanmas and Koichi Maekawa (2001). Multi-directional fixed crack approach for highly anisotropic shear behavior in pre-cracked RC members, *J. Material. Conc. Struct., Pavements*, JSCE, Vol. 50, No. 669, pp. 293-307.
  42. Amorn Pimanmas and Koichi Maekawa (2001). Control of crack localization and formation of failure path in RC members containing artificial crack device, *J. Material. Conc. Struct., Pavements*, JSCE, Vol. 52, No. 683, pp. 157-171.
  43. Amorn Pimanmas and Koichi Maekawa (2001). Numerical simulation of failure path formation and crack sequence in RC with full and local shear anisotropy, *J. of Material. Conc. Struct., Pavements*, JSCE, Vol. 52, No. 683, pp. 173-186.
  44. Amorn Pimanmas and Koichi Maekawa (2001). Shear failure of RC members subjected to generic loading paths and coupled axial tension and shear, *J. Material. Conc. Struct., Pavements*, JSCE, Vol. 53, No. 690, pp. 159-174.

#### 5.4 National Journal Publications

1. เอกชัย อยู่ประเสริฐชัย<sup>1\*</sup> พงษ์ศักดิ์ วิวัฒน์โรจนกุล<sup>2</sup> พิชัย สุวรรณสายะ<sup>3</sup> อมร พิमानมาส, พฤติกรรมภายใต้แรงแผ่นดินไหวของผนังรับแรงคอนกรีตหล่อสำเร็จรูปด้วยรอยต่อแบบการเชื่อมทาบเหล็กเส้น, SWU Engineering Journal ปีที่ 13 ฉบับที่ 1 (เดือนมกราคม-เมษายน 2561)
2. Saleem, Shahzad; Amorn Pimanmas; and Tahir Mehmood (2015). Finite element modeling of non-ductile reinforced concrete columns, *Research and Development Journal*, Vol. 26, No. 1, January-March 2015, pp. 23-34.
3. Lam, Lalin; Qudeer Hussain; and Amorn Pimanmas (2014). Shear strengthening of RC deep beams using glass chopped strand mat (GCSM), *Research and Development Journal*, Vol. 25, No. 4, October-December 2014, pp. 25-33.

4. Preeda Chaimahawan and Amorn Pimanmas (2013). Application of nonlinear link in strut and tie model for joint planar expansion, *Research and Development Journal of the Engineering Institute of Thailand*, No. 24, Vol. 4, October-December 2013, pp. 1-11.
5. Panuwat Joyklad and Amorn Pimanmas (2013). Seismic behavior of lightly reinforced concrete beam-column joints at first floor, *Kasem Bundit Engineering Journal (KBEJ)*, Vol. 3, No. 2, July-December 2013, pp. 1-25.
6. Ratkriangkrai Paoleng and Amorn Pimanmas (2012). Experimental study of ferrocement for strengthening short lap splice of RC members, *Research and Development Journal of The Engineering Institute of Thailand*, Vol. 23, No. 3, 2012, pp. 1-8.
7. Panuwat Joyklad and Amorn Pimanmas (2012). Seismic behavior of substandard RC beam-column joints dominated by cantilever action, *Kasem Bundit Engineering Journal*, Vol. 2, No. 1, January – June 2012, pp. 51-76.
8. Pragasit Jantanalikit, Panuwat Joyklad, and Amorn Pimanmas (2010). Experimental investigation of reinforced concrete beams strengthened by skeleton steel and ferrocement cover, *Research and Development Journal of The Engineering Institute of Thailand*, Vol. 21, No. 1, pp. 17-26.
9. Dam Xuan Thai and Amorn Pimanmas (2010). Strength prediction of lap splice confined with fiber reinforced polymer (FRP), *Suranaree Journal of Science and Technology*, Vol. 17, No.1, pp. 13-25.
10. Preeda Chaimahawan and Amorn Pimanmas (2009). Effect of connection reinforcement details on performance of full-scale precast concrete beam-column connection designed for gravity, *Research and Development Journal of the Engineering Institute of Thailand*, Vol. 20, No. 3, pp. 50-58.
11. Dam Xuan Thai and Amorn Pimanmas (2009). Modeling of RC column with lap splices strengthened by fiber reinforced polymer (FRP), *Research and Development Journal of the Engineering Institute of Thailand*, Vol. 20, No. 4, pp. 22-34.
12. Amorn Pimanmas (2007). Behavior and failure mode of reinforced concrete members damaged by pre-cracking, *Songklanakarin Journal of Science and Technology*, Vol. 29, No. 4, July-August 2007, pp. 1039-1048.
13. Amorn Pimanmas (2007). The effect of long-term creep and prestressing on moment redistribution of balanced cantilever cast-in-place segmental bridge, *Songklanakarin Journal of Science and Technology*, Vol. 29, No. 1, January-February 2007, pp. 205-216.

14. Panuwat Joyklad, Preeda Chaimahawan, and Amorn Pimanmas (2007). Assessment of seismic deficiency of existing reinforced concrete buildings in Bangkok, *Research and Development Journal of the Engineering Institute of Thailand*, Vol. 18, No. 3, 2007, pp. 19-28.
15. Preeda Chaimahawan and Amorn Pimanmas (2007). Simple seismic evaluation methodology for gravity-designed reinforced concrete building, *Research and Development Journal of the Engineering Institute of Thailand*, Vol. 18, No. 1, 2007, pp. 35-45.
16. Teeraphot Supaviriyakit and Amorn Pimanmas (2007). Comparative performance of a substandard beam-column joint with and without initial bond between beam bars and concrete in the joint core, *Thammasat International Journal of Science and Technology*, Vol. 12, No. 1, January-March 2007, pp. 42-51.
17. Teeraphot Supaviriyakit, Phuwanat Pornpongsoj, and Amorn Pimanmas (2004). Finite element analysis of FRP-strengthened RC beams, *Songklanakarin Journal of Science and Technology*, Vol. 26, No. 4, July-August 2004, pp. 497-507.

#### 5.5 International Conference papers

1. Sakol Suon, Shahzad Saleem, Amorn Pimanmas; Compressive Behavior of Circular Concrete Columns Confined by Basalt Fiber Reinforced Polymer (BFRP); The 2<sup>nd</sup> International Conference on Civil and Building Materials (ICCBM2018), Fukuoka, Japan, 20-22, 2018.
2. Shahzad Saleem and Amorn Pimanmas; Compressive Behavior of PET FRP-Confined Non-Circular RC Columns, In Proceedings of The 8th Asia and Pacific Young Researchers and Graduates Symposium, 7-8 September 2017, Tokyo, Japan.
3. Atipphat Suwattanakorn; Qudeer Hussain; Winyu Rattanapitikon; and Amorn Pimanmas (2016). Behavior of rectangular concrete column confined with sisal fiber reinforced polymers (Sisal FRP). In *Proceedings of the 2016 International Conference on Composite Materials and Material Engineering (ICCMME2016)*, 9-11 March 2016, Bangkok, Thailand, Paper No. 33-ICCMME2016-346E, 4 p.
4. Arissaman Sangthongtong; Qudeer Hussain; and Amorn Pimanmas (2016). Compressive behavior of concrete confined by hemp fiber composite jackets. In *Proceedings of the 2016 International Conference on Composite Materials and Material Engineering (ICCMME2016)*, 9-11 March 2016, Bangkok, Thailand, Paper No. 39-ICCMME2016-351E, 4 p.
5. Yinh, Seyha; Qudeer Hussain; Winyu Rattanapitikon; and Amorn Pimanmas (2016). Flexural behavior of reinforced-concrete (RC) beams strengthened with hemp fiber-reinforced polymer



- (FRP) composites. In *Proceedings of the 2016 International Conference on Composite Materials and Material Engineering (ICCMME2016)*, 9-11 March 2016, Bangkok, Thailand, Paper No. 34-ICCMME2016-347E, 4 p.
6. Khan, Arslan Qayyum; Qudeer Hussain; Winyu Rattanapitikon; and Amorn Pimanmas (2016). Flexural strengthening of RC beams with sisal fiber composites and sisal fiber rods. In *Proceedings of the 2016 International Conference on Composite Materials and Material Engineering (ICCMME2016)*, 9-11 March 2016, Bangkok, Thailand, Paper No. 36-ICCMME2016-348E, 4 p.
  7. Sanyawit Siriluk; Qudeer Hussain; Winyu Rattanapitikon; and Amorn Pimanmas (2016). Shear strengthening of reinforced concrete beams with HFRP composite. In *Proceedings of the 2016 International Conference on Composite Materials and Material Engineering (ICCMME2016)*, 9-11 March 2016, Bangkok, Thailand, Paper No. 37-ICCMME2016-349E, 4 p.
  8. Khan, Arslan Qayyum; Qudeer Hussain; Winyu Rattanapitikon; and Amorn Pimanmas (2015). Strengthening of reinforced concrete beams with SFRP composites. In *Proceedings of the 9th Asia Pacific Structural Engineering and Construction Conference (APSEC 2015) and 8th Asean Civil Engineering Conference (ACEC 2015)* [CD-ROM], 3-5 November 2015, Kuala Lumpur, Malaysia, 6 p.
  9. Arissaman Sangthongtong, Qudeer Hussain and Amorn Pimanmas (2015). Behavior of square and rectangular concrete columns strengthened with hemp fiber. In *Proceedings of the 9th Asia Pacific Structural Engineering and Construction Conference (APSEC 2015) and 8th Asean Civil Engineering Conference (ACEC 2015)* [CD-ROM], 3-5 November 2015, Kuala Lumpur, Malaysia, 6 p.
  10. Atipphat Panyasirikhunawut; Qudeer Hussain; Winyu Rattanapitikon; and Amorn Pimanmas (2015). Axial behavior of concrete externally confined with sisal FRP. In *Proceedings of the 9th Asia Pacific Structural Engineering and Construction Conference (APSEC 2015) and 8th Asean Civil Engineering Conference (ACEC 2015)* [CD-ROM], 3-5 November 2015, Kuala Lumpur, Malaysia, 6 p.
  11. Lam, Lalin; Qudeer Hussain; and Amorn Pimanmas (2015). De-bonding of chopped glass strand mat (CGSM) composites in shear. In *Proceedings of the 9th Asia Pacific Structural Engineering and Construction Conference (APSEC 2015) and 8th Asean Civil Engineering Conference (ACEC 2015)* [CD-ROM], 3-5 November 2015, Kuala Lumpur, Malaysia, 6 p.

12. Hussain, Qudeer and Amorn Pimanmas (2015). Contribution of externally bonded sprayed FRP to shear capacity of RC deep beams. In *Proceedings of the 9th Asia Pacific Structural Engineering and Construction Conference (APSEC 2015) and 8th Asean Civil Engineering Conference (ACEC 2015)* [CD-ROM], 3-5 November 2015, Kuala Lumpur, Malaysia, 6 p.
13. Vinh, Seyha; Qudeer Hussain; Winyu Rattanapitikon; and Amorn Pimanmas (2015). Strengthening of concrete beams using sisal FRP. In *Proceedings of the 9th Asia Pacific Structural Engineering and Construction Conference (APSEC 2015) and 8th Asean Civil Engineering Conference (ACEC 2015)* [CD-ROM], 3-5 November 2015, Kuala Lumpur, Malaysia, 6 p.
14. Lam, Lalin; Qudeer Hussain; Panuwat Joyklad; and Amorn Pimanmas (2015). Behavior of RC deep beams strengthened in shear using glass fiber reinforced polymer with mechanical anchors. In *Proceedings of 2015 International Conference on Environment and Civil Engineering (ICEACE'2015)*, 24-25 April 2015, Chon Buri, Thailand, pp. 83-88.
15. Hussain, Qudeer; Lam Lalin; and Amorn Pimanmas (2014). Strength and ductility of SGFRP confined concrete. In *Proceedings of SETCOR International Conference on Smart Materials and Surfaces (SMS Bangkok 2014)*, 26-28 August 2014, Bangkok, Thailand, 4 p.
16. Ratkiangkrai Paoleng and Amorn Pimanmas (2011). An experimental study on strengthening lap splice by ferrocement jacket. In *Proceedings of the 10<sup>th</sup> International Symposium on New Technologies for Urban Safety of Mega Cities in Asia (USMCA 2011)* [CD-ROM], 12-14 October 2011, Chiang Mai, Thailand, 9 p.
17. Amorn Pimanmas and Preeda Chaimahawan (2011). Cyclic shear resistance of expanded beam-column joint. In *the Twelfth East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-12)*, 26-28 January 2011, Hong Kong, China.
18. Preeda Chaimahawan and Amorn Pimanmas (2010). The analysis of beam-column joint retrofitted by in-situ joint enlargement. In *Proceedings of the third Asian Conference on Earthquake Engineering*, 1-3 December 2010, Bangkok, Thailand.
19. Thai Xuan Dam and Amorn Pimanmas (2009). Nonlinear analysis of RC column with short lap splice length strengthened by FRP jacketing. In *Proceedings of the 6th Asian Symposium on Polymers in Concrete*, 29-30 October 2009, Shanghai, China. pp. 373-380.
20. Pragsit Juntanalikit; Panuwat Joyklad; and Amorn Pimanmas (2009). Shear strengthening of reinforced concrete beams using ferrocement. In *Proceedings of the 8th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia (USMCA 2009)*, 15-16 October 2009, Incheon, Korea. pp. 301-312.

21. Pragsit Juntanalikit and Amorn Pimanmas (2009). Nonlinear analysis of shear strengthening of reinforce concrete columns by using fiber reinforce polymer. In *Proceedings of the 8th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia (USMCA 2009)* , 15-16 October 2009, Incheon, Korea. pp. 131-142.
22. Amorn Pimanmas and Panuwat Joyklad (2009). Effects of debonding on behaviors of substandard bridge piers. In *Proceedings of the Sixth Regional Symposium on Infrastructure Development (RSID6)* [CD-ROM], 12-13 January 2009, Bangkok, Thailand. Paper No. STR22, 6 p.
23. Panuwat Joyklad and Amorn Pimanmas (2009). Assessment of seismic performance of existing bridge piers in Bangkok. In *Proceedings of the Sixth Regional Symposium on Infrastructure Development (RSID6)* [CD-ROM], 12-13 January 2009, Bangkok, Thailand. Paper No. STR23, 6 p.
24. Preeda Chaimahawan and Amorn Pimanmas (2009). Nonlinear FEM analysis of RC beam-column joint upgraded by planar joint expansion. In *Proceedings of the Sixth Regional Symposium on Infrastructure Development (RSID6)* [CD-ROM], 12-13 January 2009, Bangkok, Thailand. Paper No. STR24, 6 p.
25. Amorn Pimanmas and Preeda Chaimahawan (2008). Relocation of plastic hinge of substandard beam-column joint by joint planar expansion. In *Proceedings of the Eleventh East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-11) "Building a Sustainable Environment"* [CD-ROM], 19-21 November 2008, Taipei, Taiwan. 6 p.
26. Panuwat Joyklad and Amorn Pimanmas (2008). The seismic behavior of reinforced concrete bridge pier with debonded reinforcements and interface dowels. In *Proceedings of the Eleventh East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-11) "Building a Sustainable Environment"* [CD-ROM], 19-21 November 2008, Taipei, Taiwan. 6 p.
27. Amorn Pimanmas and Preeda Chaimahawan (2006). Seismic evaluation methodology for gravity-designed reinforced building. In *Proceedings of the Fifth International Symposium on New Technologies for Urban Safety of Mega Cities in Asia (USMCA 2006)* [CD-ROM], 16-17 November 2006, Phuket, Thailand. pp. 449-459.
28. Preeda Chaimahawan and Amorn Pimanmas (2006). Seismic vulnerability of existing reinforced concrete building in Bangkok, Thailand. In *Proceedings of the Fifth International Symposium on New Technologies for Urban Safety of Mega Cities in Asia (USMCA 2006)* [CD-ROM], 16-17 November 2006, Phuket, Thailand. pp. 545-555.
29. Preeda Chaimahawan; Teeraphot Supaviriyakit; and Amorn Pimanmas (2006). Behavior of full-scale precast concrete beam-column connection under cyclic load. In *Proceedings of the Tenth*

- East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-10)* [CD-ROM], 3-5 August 2006, Bangkok, Thailand. Vol. 2, pp. 85-90.
30. Teeraphot Supaviriyakit; Amorn Pimanmas; and Pennung Warnitchai (2006). Effect of removing initial bond between beam bar and concrete on cyclic response of non-ductile beam-column joint. In *Proceedings of the Tenth East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-10)* [CD-ROM], 3-5 August 2006, Bangkok, Thailand. Vol. 3, pp. 85-90.
  31. Amorn Pimanmas and Knut H. Nielsen (2005). The effect of long-term creep on moment redistribution of Pathum Thani bridge crossing the Chao- Praya river. In *Proceedings of the Fourth International Conference on Current and Future Trends in Bridge Design, Construction and Maintenance*, 10-11 October 2005, Kuala Lumpur, Malaysia. pp. 283-292.
  32. Amorn Pimanmas and Jiraphong Tisavipat (2004). Shear strength degradation of reinforced concrete deep beam due to pre-cracking. In *Proceedings of the 1st International Conference on Asian Concrete Federation*, 28-29 October 2004, Chiang Mai, Thailand. 8 p.
  33. Pennung Warnitchai; Sommai Pongpornsup; Unnop Prawatwong; and Amorn Pimanmas (2004). Seismic performance of post-tensioned interior flat slab-column connections. In *Proceedings of the Third International Symposium on New Technologies for Urban Safety of Mega Cities in Asia*, 18-19 October 2004, Agra, India. pp. 147-156.
  34. Amorn Pimanmas; Pennung Warnitchai; and Sommai Pongpornsup (2004). Seismic performance of 3/5 scaled post-tensioned interior flat slab- column connections. In *Proceedings of Asia Conference on Earthquake Engineering (ACCE2004)*, 5-6 March 2004, Manila, Phillipines. 8 p.
  35. Pennung Warnitchai; Amorn Pimanmas; and Do Tien Thinh (2004). Seismic performance of RC sub-assemblages with non-seismic reinforcement details. In *Proceedings of Asia Conference on Earthquake Engineering (ACCE2004)*, 5-6 March 2004, Manila, Phillipines. 8 p.
  36. Amorn Pimanmas, Phuwanat Pornpongsaroj, and Theeraphot Supaviriyakit (2003). Strengthening of opening in reinforced concrete beam by surface-mounted FRP rod. In *Proceedings of the Ninth East Asia-Pacific Conference on Structural Engineering and Construction*, 16-18 December 2003, Bali, Indonesia, 6 p.
  37. Phuwanat Pornpongsaroj and Amorn Pimanmas (2003). Effect of end wrapping on peeling behavior of FRP-strengthened beams. In *Proceedings of the Sixth International Symposium on Fibre-Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-6)*, 8-10 July 2003, Singapore, Vol. 1, pp. 277-286.

38. Phuwanat Pornpongsaroj and Amorn Pimanmas (2003). End wrapping method for preventing peeling failure of FRP-strengthened beams. In *Proceedings of the Forth Regional Symposium on Infrastructure Development in Civil Engineering (RSID-4)*, 3-5 April 2003, Thailand, pp. 91- 96.
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44. Amorn Pimanmas and Kazumasa Ozawa (1996). Mathematical modeling of shear constitutive relationship for flowing fresh concrete, *Int. Conf. on Urban Eng. in Asian Cities in the 21<sup>st</sup> Century*, AIT.
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**6. Major Design projects (During 2000-2015 only, projects during 2016-current are being updated)**

**2014-2015**

1. 25 Storey Hotel Project: Retrofit design for transferred floor,
2. 45 Storey Condominium Project, Strengthening design of long column

3. 54 Storey Condominium Project: Strengthening design of transferred floor
4. Structural modification of IRPC plants and vortex shedding calculation, Client Technip Co. Ltd.
5. Mahasarakham Hospital: Strengthening design of ground floor column
6. Compressor Machine foundation design: SCG-Chemicals
7. Compressor Machine foundation design: ToyoThai Co., Ltd.
8. CFRP Strengthening design of structural floor at NOK3 factory
9. CFRP strengthening design of structural floor at CPRAM factory
10. CFRP strengthening design of structural floor at Ladkrabang factory
11. CFRP strengthening design of structural floor at Saimai Hospital
12. Structural design check of footing at DENSO factory
13. Structural design check of footing for 115kV CB support structures
14. Load test of SRT redline viaduct: Italian Thai Co., Ltd.
15. Blue line viaduct span 34.86-30.07-32.53 m Design
16. Blue line viaduct span 28.50-40.73-36.76 m Design
17. Camber design calculation for unit JML7, JML-8, JML-27, JML-25, JML-24, JRM, JML-21, APR3 for the Jahra Road Kuwait Project
18. Stress calculation check of Balanced Cantilevered bridge over Klong Bangkok Noi

### **2013**

1. New 20 Storey Bangkok Christian Hospital Design
2. Truss modification design: Shrimp Factory Hue Vietnam
3. Machine foundation design for Paper Factory: SCG Paper
4. Stress and camber calculation of bridge Unit JRA2 in Jahra Road Kuwait Project
5. Redesign of Camber for the Tverland bridge construction project.
6. Stress and camber calculation of balanced cantilevered bridge unit JRD3 in Jahra Road Kuwait Project
7. Camber calculation of bridge unit JML-5 and J9 in Jahra Road Kuwait Project
8. Stress calculation check of elevated structures in Purple Line Construction project
9. Stress calculation check of balanced cantilevered bridge to support launching gantry for the Blue line construction project

**2012**

1. Blue Line Project: Balanced Cantilever Bridge over klong BangkokNoi
2. Jahra Road Kuwait project
3. Floor strengthening by CFRP at NOK2 and NOK3
4. Beam strengthening by CFRP at a factory in Surat-thani

**2011**

1. Lamphun Electrical Substation
2. Pimnara Boutique Hotel
3. Infosafe factory CFRP floor strengthening project
4. Tverland bridge
5. Balanced Cantilever B2 in Purple Line construction project
6. Load test of SRT viaduct structure (Red line construction: Bangsue-Talingchan)
7. FEM analysis and strengthening design of damaged pile cap supporting the Burapha Withi Expressway
8. Construction stage analysis of portal frame in purple line project

**2010**

1. Strengthening TPI cement silo
2. Purple Line: Portal frame types PF1, PF2, PF8, PF10, PF4, PF7
3. Purple Line: Taopoon station portal frame
4. Purple Line Balanced Cantilever B2
5. Car park building floor Strengthening project: Bangkok University
6. Analysis and design of foundation to support vibratory machines (PPT project)
7. Construction supervision of 5 storey main administration building

**2009**

1. STR Redline Bangsue-Talingchan: Precamber calculation of rail bridge over Chaopraya River:  
Cantilever M2, M5 and M6
2. Purple Line: Taopoon Station

3. Western Corridor Project: Railway and local road bridge over Khlong Bangkok Noi
4. Western Corridor Project: Railway bridge over Chao Phraya River
5. SiamParagon Grond floor-strengthening design
6. Airport Rail Link – Extension Project
7. SIIT Main administration buildings Extension

**2008**

1. Algeria Bridge: Auto Route East-West
2. SIIT Student Activity Building construction project
3. Strengthening design of column using FRP wrapping

**2007**

1. Bang Pa-In to Nokhon Ratchasima section II
2. Gateway Bridge Dubai Monorail Project
3. MRT Blue Line Project
4. Agas-Agas Japan-Philipines Friendship Bridge
5. Airport Rail Link project: 60 m curved balanced cantilever bridge
6. Airport Rail Link: 85 m main span balanced cantilever bridge (substructure)

**2006**

1. Grevenitikos bridge
2. New Nangkloa Bridge Highway Route No. 302 (Ratanathibeth)
3. Airport Rail Link project: 85 m balanced cantilever bridge (superstructure)
4. Dubai Monorail Transit Project
5. Detailed design of structure at Trump tower station
6. Detailed design of structure at Atlantis nontypical axis 165-170
7. Pile design revision for MS1
8. Trump Plaza Superstructure detailed design (axis 61-68)
9. Trump Plaza Superstructure detailed design (axis 61-68)
10. Trump Plaza Superstructure detailed design (axis 61-68)
11. Trump Plaza Pile detailed design (axis 61-68)
12. Switch bridge Superstructure detailed design
13. Basic design non-typical span axis 169-170 piling works
14. Detailed design of non-typical span axis 157-162 MS3 piling works with fender
15. Detailed design of non-typical span axis 145-151 MS3 piling works with fender



**2005**

1. West corridor Project: Expressway bridge across Chao Praya River
2. Mae-Klong Southern Railway: Railway bridge across Chao-Phraya River
3. 3<sup>rd</sup> Runway Suvarnabhumi Airport

**2000-2004**

1. Srirat-Dao Khanong Cable stayed bridge
2. Industrial Ring Road project
3. Amata Golf Club house
4. Bangkok Bay Bridge
5. Makaza Viaduct Bridge
6. Rangsit Interchange Improvement
7. Pathum-Thani Bridge widening project