

Dr. Prathan Rungthonkit



Nationality: Thai and British, Date of Birth: 12 June 1978

Email: p.rungthonkit@gmail.com Tel. 087-257-2575

Address: 1220 Wachirathamsatit 52 Sukhumvit 101/1, Bang Chak, Prakanong Bangkok, 10260

Dr. Prathan Rungthonkit is a PhD senior structural and chief geotechnical engineer with a professional civil engineering license (Sor. Yor. 14572). Strengths in leadership, bid proposal submission, interpersonal, communication, organisation and IT skills. A specialist in Structural Insulated Panels (SIPs), bridge, tunnel and building design. Performs well under pressure and to tight deadlines. Reliable, innovative, and possesses excellent analytical skills with finite element analysis.

KEY SKILLS

- Prepare bid plans with win strategy reviews for each opportunity.
- Expert in project management, project planning and cost estimates.
- Lead on developing responses to Expressions Of Interest (EOIs) and Requests for Tenders (RfTs).
- Specialist in Structural Insulated Panels (SIPs) and research and development (R&D).
- Expert in bridge, tunnel and building design, assessment, maintenance, strengthening and feasibility studies.
- Expert in designing of steel, concrete, timber, composite materials and geotechnical design.
- Experience in highway and pavement design.
- Fully conversant with the relevant structural British, European, American and Thai standards.
- Excellent IT skills, proficient in Finite Element Analysis especially in ETABS, ABAQUS, ANSYS, LUSAS, RISA, Midas, SuperSTRESS, STAAD PRO, SCALE and QSE structural analysis.
- Excellent in English language, able to carry out a technical report writing, presentation and proof reading.
- Able to write a computer programme, repair computer and set up a computer network.

EDUCATION

PhD in structural engineering, University of Birmingham (2012), England.

MEng (Honours) in civil engineering, University of Nottingham (2002), England, obtained 2:1.

BEng in civil engineering, Thammasat University (2002), Bangkok, obtained GPA: 3.09.

PROFESSIONAL MEMBERSHIP

- Professional Civil Engineer (Sor. Yor. 14572) of Council of Engineers (COE), Thailand.

WORK EXPERIENCE

June 2020 - Present: **Senior Structural Engineer and Chief Geotechnical Engineer**, Dynamic Engineering Consultants Co., Ltd. of SEATEC Group.

Responsible for design and construction supervision of the following projects:

- Project Manager, currently managing a multi-disciplinary engineering team for Design Consultancy and Construction Management Services for Tate & Lyle DASH Project in Nakhon Ratchasima Province. This project is to improve and modify tapioca starch plant. The plant is 48 m wide and 102 m long with the total of the construction cost \$20 million US dollars (700 million Thai bahts). I am also preparing for the construction permit to the local authority and preparing the tender and contract document to contractors.
- Project Manager, recently managed and prepared proposal in English for Design Consultancy and Construction Management Services for VKPC Polaris Project by SCG Packaging Public Company Limited (SCGP) - the owner. VKPC Polaris Plant is located in Binh Xuyen Industrial Park, Vinh Phuc Province, Vietnam. The plant covers an area of approximately 40 hectares (400,000 m²). SCGP intends to construct a new paper machine with the capacity of 370,000 tons per annum of the Liner Packaging. The project is planned to start in the 3rd quarter of 2023.
- Senior Structural Engineer and Chief Geotechnical Engineer, recently completed the Independent Design Checking Engineer (IDCE) in Laem Chabang Port Phase II, Terminal D. The detailed engineering design was carried out by AECOM Thailand and I carried out a review and parallel calculation of pavements, container plinths and eRTG Beams in order to confirm their adequate and reasonable design. The project was completed within the budget and time with a strong relationship with AECOM and Hutchison (the owner).
- Technical Report Writer, Senior Structural Engineer and Chief Geotechnical Engineer, completed a pre-feasibility study on a new Phuket Island. I was responsible for writing technical engineering design report to build the new Phuket Island that will be a new landmark island for tourists and visitors in Phuket Bay.
- Senior Structural Engineer, Design Consultancy Services for Detailed Design of Government center extension, Zone C-Commemoration the 80th King's Birthday Celebration, 5 December 2007, Zone-C Project at Chaengwatana Road, Bangkok For Dhanarak Asset Development Co.Ltd. Construction cost is approximately 21,600 Million Baht. The project consists of the following:
 - The development of extension area in Zone C in order to allocate the Government agency building. The land plot is approximately 81 rai for the large office building with two basement floors. The total construction area is about 660,000 sq.m.
 - Office space improvement in the government agency building for some replacement agencies.
 - Improvement of interior and landscape, including the transportation, public utility and all related systems within the Government Center Area of Zone A and B in order to increase the efficiency of the building.
 - Design and allocate the area for some agencies in accordance with their needs and some relate regulations.
- Senior Structural Engineer and Chief Geotechnical Engineer, Design Consultancy Services for GTT-Office Buildings Project in Dhaka, Bangladesh for Grameen Telecom Trust Limited, Bangladesh. The proposed project is for the construction of an Office Building (10-storeys with 2 basements) and Hotel Building, (11-storeys with 2 basements for car parking). Total area 27,800 sq. m. Construction cost is approximately 1,200 Million Baht.
- Senior Structural Engineer and Chief Geotechnical Engineer, Development of Master Plan and Design Consultancy Services of Samajik Convention Center Complex, Phase 2 Project at Dhaka, Bangladesh for Grameen Telecom Trust, Bangladesh. The proposed project is for the construction of Convention Centre Complex consisting of the following buildings: 3-Stars Hotel, Office Tower

1-2, Exhibition Hall,, Hospitality Training Center, Staff & Student Dormitories, Folk Arts Center and Gymnasium/Food Court Overall Project Area: 170,000 sq. m. Construction cost: 5,000 Million Baht.

August 2013 – Present: **Part-time Lecturer, Thammasat University, Thailand**

Responsible for teaching the following subjects:

- Engineering Graphics and Workshop
- Soil Mechanics and Soil Mechanics Laboratory
- Pre-Engineering Course
- Engineering Mechanics

In addition, I was also a project consultant on “Thermal Insulating Concrete Wall Using E-Waste Project” This project was fully funded by the Ministry of Energy in 2019 - 2020.

August 2013 - May 2020: **Structural Engineer, P.S.V. Engineering Co., Ltd., Bangkok**

- Surveyed and evaluated work sites for residential repairs.
- Prepared BOQ showing items in construction work.
- Supervised and coordinated with the construction teams.

February 2013 - July 2013: **Structural Engineer, International Engineering Consultants (IEC), Bangkok**

- Project manager on the Siam Commercial Bank (SCB) headquarter car park inspection. I managed and planned a team of four engineers to carry out three car park buildings. I also prepared a method statement document and an inspection report.
- Preliminary design on new railway maintenance buildings at Keang Koi, Saraburi. I was responsible for carrying out a preliminary design on four reinforced concrete buildings, attending various meetings with client (State Railway of Thailand) in order to present the concept of the preliminary design and to update the design progress.
- Feasibility study on floodway project from Chai Nat to Gulf of Thailand. I prepared a powerpoint presentation to present the construction sequence of floodway.

July 2011 - February 2013: **Structural Engineer, Amey, Birmingham, England**

- Project manager on Area 9 MAC Hinge-Joint Management Strategy. This project included inspections, monitoring and testing, preparation of interim measures and update of Hinge-Joint Deck Structures Management Strategy Report.
- Managed structures for assessment on 1,240 highway structures on Area 9 MAC contract by carrying out prioritisation score based on existing conditions and records of the structures.
- CAT II Assessment of M50/10.30 Horse Bridge using LUSAS 3-dimensional finite element analysis. This project involved project management, inspection for assessment, modelling and analysis of structure, liaison with the checker and preparation of the assessment certificate.
- CAT II Assessment of Type FA/6, FA/8, FA/9, FB/8 and FB/9 pile caps within Area 9 Bromford Viaduct. Each pile cap type is being assessed by using 3D conical strut and tie model and punching shear methods in order to determine pile cap rating.

- Various giving presentations to colleagues.
- Guided/Advised junior engineers and technicians.

Nov 2007 - June 2011: a **PhD researcher, University of Birmingham, Birmingham, England**

The PhD research was fully funded by the UK government, ErgoHome Ltd and University of Birmingham. I carried out the research on Structural Insulated Panels (SIPs). SIPs are an exciting new composite building material suitable for energy efficient construction. I carried out background reading, visited manufacturers, understood processes then undertook extensive laboratory testing and collated results to the high standards of a red brick university.

Not only carrying out an excellent PhD study, I won the research category 2011 award organised by the Midland Counties Branch, the Institution of Structural Engineers on 23rd June 2011. A plaque was presented by the President of IStructE, Professor Roger Plank. This was the second year running that I won the award. In addition, I was also awarded the Guest, Keen and Nettlefolds Academic Excellence Scholarship 2010.

During my PhD study, I also supervised five MEng students (two of them obtained first class) and helped in teaching/demonstrating for undergraduate students as following activities:

- I was a laboratory demonstrator for structural modules for undergraduate students. In addition, I helped in teaching and marking up the coursework.
- I also helped in the school open days for prospective students. This showed my willingness and ability to take responsibility for the school administration.

Aug 2002 - Oct 2007: Assistant Engineer, **Atkins Highways and Transportation, Birmingham, England**

- Developed excellent innovative and analytical skills from working on various design and assessment (35 structures) of reinforced concrete, reinforced concrete / steel composite, pre-stressed concrete and steel highway structures on Area 6, 10 and 11 MAC contracts.
- Took responsibility for project management, programme, cost estimates and work quality control.
- Responsible for CAT II Design Check of C110/10 Shavelhaugh Bridge – a deck replacement. This project involved project management, costing and programming, modelling and analysis of structure, liaison with the assessor and preparation of the design certificate.
- Responsible for Area 6 and 11 Steady State Assessment, involved in project management, liaison with assessor and checker and preparation of assessment report and certificate. The schemes include:
 - Area 6 A47 Thorney Toll Bridge: CAT II Assessment Check of a simply support reinforced concrete.
 - Area 11 M6 Penkrige-Cannock Road Bridge: Assessment of a three-span structure with two side spans cantilevering over inclined piers to form the central span with hinge joints.
 - Area 11 A46 St Martins Road Bridge: Assessment of a three-span continuous composite deck with steel beams and reinforced concrete slab.
 - Area 11 M69 Bulkington Road Underbridge: Assessment of a simply supported single span pre-cast pre-stressed beam with composite slab deck.

- Area 11 A38 Horninglow Road Bridge: Assessment of a single span reinforced portal frame with a voided, post tensioned deck slab.
- Feasibility study on 18 structures for strengthening and repair of M53 Junction 7 - 9 structures.
- Reviewing of Approval in Principle (AIP) reports, assessment reports and assessment and check certificates.
- Supervising junior engineers in preparation of work specifications and Bill of Quantity (BOQ) for structural work. Provided technical assistance to junior engineers and technicians. Also created and made technical presentations to other colleagues. This further improved my communication skills.
- Liaison with structural assessors and checkers, government agencies and local authorities.
- Experience in gantry design and assessment by working on Area 10 M62/M32.50 MS3 cantilever gantry sign replacement.
- Experience in design of foundation and retaining walls.
- Undertook site visits and inspections on Area 11 structures.
- Undertook Area 11 SMIS data entry and reporting.
- Implemented Atkins' quality procedures on all projects.
- Actively promoted Health and Safety in the workplace as set out in the Atkins' Health and Safety Management System.
- Chairman of the unit CQ (Atkins) sports and social club 2006 - 2007. This role enhanced both my leadership and interpersonal skills by organising events for 300 colleagues.
- Responsible for highway and pavement design on A1 Grade Separated Junctions.
- Supervising the product of drawings to technicians.
- Preparation of design development report on A1 Markham Moor Junction.
- Highway Feasibility Study on M32/M4 Westbound Diverge Improvement.
- Cost evaluation on M6 Permanent 4 lanes widening between M6 Junction 11a - 15.

AWARDS AND ACHIEVEMENTS

- Project Consultant on "Thermal Insulating Concrete Wall Using E-Waste Project" This project was fully funded by the Ministry of Energy in 2019 - 2020.
- EPSRC, ErgoHome Ltd and University of Birmingham PhD scholarship 2007 - 2011.
- Winner in the research category 2010 and 2011 awards organised by the Midland Counties Branch, the Institution of Structural Engineers.
- Guest, Keen and Nettlefolds Academic Excellence Scholarship 2010.
- Secretary of the Great Stone Road, Kingshurst Road, Hazel Croft and Beech Farm Croft residential association Aug 2009 to present.
- Chairman of the research student and staff liaison committee in the school of civil engineering 2008 - 2010. This involved chairing meetings, problem solving between students and staff and also organising social events.
- Student representative in the school of civil engineering 2007 - 2010.
- Snooker and pool society president 2009 - 2010, University of Birmingham.
- Represented the University of Birmingham as a pool player in 2007 - 2010 and won the bronze medal in the 8-ball pool team championship in the British Universities and Colleges Sport (BUCS) 2007 - 2008.
- Chairman of the unit CQ sports and social club 2006 - 2007.

- The team leader who led the team to finish a respectable 8th out of 230 teams from all over the country and was the highest ranking Atkins team in MERIT (Management, Enterprise, Risk, Innovation and Teamwork) 2006.
- Finished in the top 6 of the individual Mathematics CleverClogs National (UK) 2006 Competition which consisted of 183 professions in the civil engineering industry.
- Thai society president 2001 - 2002, University of Nottingham and won the best innovation award for Thai society.
- Snooker society president 2000 - 2001, University of Nottingham, established the first snooker society at the university and won the team plate championship in the British University Sports Association (BUSA) 2000.
- Best initiative student 1997, Taphanhin High School, Phichit Province.
- 1st Ranking in Mathematics of Phichit Province in 1997.
- 66th Ranking in Mathematics of Thailand in 1997.

PUBLICATIONS

- Makmoolphol R. and Rungthonkit P. (2018) "Investigation on Thermoelectric with different materials and circuit types" The 9th TSME International Conference on Mechanical Engineering. Phuket, Thailand. 11th - 14th December 2018, Pages 39 - 45.
- Rungthonkit, P., Yang, J. and Clark, L. A. (2012) "Experimental, Numerical and Analytical Investigation of long-term behaviour of Structural Insulated Panels" the First International Conference on Performance-based and Life-cycle Structural Engineering, Hong Kong, China. 5th - 7th December 2012.
- Rungthonkit, P. and Yang, J. (2009) "Behaviour of Structural Insulated Panels (SIPs) under both short-term and long-term loadings" 11th International Conference on Non-conventional Materials and Technologies Materials for Sustainable and Affordable Construction, University of Bath, Bath, UK, 6th - 9th September 2009. ISBN No. 9781861971784.

PRESENTATIONS

- "Behaviour of Structural Insulated Panels (SIPs) under combined axial and transverse loadings" in the 2nd BEAR Postgraduate 2011 Conference, University of Birmingham on 23rd June 2011.
- "Behaviour of Structural Insulated Panels (SIPs) under both short-term and long-term loadings" in the 11th International Conference on Non-conventional Materials and Technologies Materials for Sustainable and Affordable Construction, University of Bath, Bath, UK, 6th - 9th Sep 2009.
- "Structural Insulated Panel (SIP) system" at Atkins, Birmingham on 3rd August 2009.
- "Structural Insulated Panel (SIP) system" in the graduate school networking, University of Birmingham on 1st July 2009.
- Took part in the Research Poster Conference 2009, organised by the graduate school, University of Birmingham on 10th June 2009.
- One of the nine finalists selected across the UK to present PhD research "An innovative and sustainable building system using Structural Insulated Panel (SIP) system" in the 11th Young Researchers Conference 2009 organised by the Institution of Structural Engineers on 18th March 2009.

- “Introduction to Reinforced Concrete Bridge Assessment and M6 Penkrige-Cannock Road Bridge” at Atkins, Birmingham on 19th September 2006.

PROFESSIONAL TRAINING COURSES

- Structural Design for Earthquake Resistance, 3-6 August 2021.
- Preparation for Professional Civil Engineering Examination, 24 July and 7 August 2021.
- Advanced non-linear finite element analysis, 15-16 January 2009.
- EN1992 Eurocode 2: Design of concrete structures, 14 June 2006.
- Finite Element Method for Bridge Design, 31 October 2005.
- EN1997 Eurocode 7: Geotechnical design, 15 April 2005.
- BS 5400 Steel and Concrete Bridge Design, 13-15 November 2002.

PERSONAL INTERESTS

- Interested in applying computer aided tools within civil engineering.
- Enjoy organising sports and social events, a keen photographer and video event producer.
- Often play snooker and pool, and was a snooker coach at both University of Birmingham and Nottingham.
- English report writer.