CURRICULUM VITAE

PERSONAL PARTICULARS

Name : Prof. S.M.A. Nanayakkara

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Date of Birth : 10th March 1958
Present post : Senior Professor in Civil Engineering

ACADEMIC QUALIFICATIONS

1. D.Eng - University of Tokyo, Japan, 1990
2. M.Eng.-University of Tokyo, Japan, 1987
3. B.Sc. Engineering (Hons.) -University of Moratuwa, Sri Lanka, 1982.

ACADEMIC AND PROFESSIONAL EXPERIENCE

- Feb 2021 – March 2022 – Senior Consultant, Department of Civil Engineering, University of Sri Jayewardenepura
- July 2020 – Sept. 2020- Competent Authority, Institute of Technology University of Moratuwa
- Sept 2018 – June 2020 – Senior Consultant, Department of Civil Engineering, University of Sri Jayewardenepura
- Jan. 2013 to Feb. 2016 – Head/Department of Civil Engineering, University of Moratuwa
- Acting Dean/Faculty of Engineering, University of Moratuwa from 16/09/2013 to 20/09/2013, from 26/05/2014 to 02/06/2014, from 18/01/2015 to 26/01/2015, from 11/03/2015 to 18/01/2015.
- Nov. 2014 to date – Senior professor in Civil Engineering, University of Moratuwa
- Oct. 2006 to Oct. 2014 – Professor in Civil Engineering, University of Moratuwa
- November 1990 to Oct. 2006 – Senior Lecturer, Dept. of Civil Engineering, University of Moratuwa.

- September 2004 to March 2005 – Research Fellow, Department of Civil and Environmental Engineering, Imperial College London, United Kingdom
- June 1999 to March 2000 – Research Fellow, Department of Civil Engineering, University of Tokyo, Japan
- October 1985 to October 1990 – Research Student, Department of Civil Engineering, University of Tokyo, Japan
- September 1982 to October 1990 (on study leave from Sept. 1985 to Oct. 1990) - Assistant Lecturer, Department of Civil Engineering, University of Moratuwa.

MEMBERSHIP OF PROFESSIONAL INSTITUTIONS

- Member, Institution of Engineers, Sri Lanka
- Honorary Fellow, Society of Structural Engineers, Sri Lanka

1.0 CONTRIBUTION TO TEACHING AND ACADEMIC DEVELOPMENT

1.1 TEACHING EXPERIENCE

November 1990 to date - Senior Lecturer / Professor/Senior Professor: Department of Civil Engineering, University of Moratuwa, Sri Lanka

Undergraduate Teaching and research

1. Teaching on Structural Engineering and Building Construction & Materials subjects to Civil. Engineering students at Semester 2, Semester 7.
2. Teaching on Construction Materials to Materials Science and Engineering students at semester 8.
3. Supervision of final year undergraduate research projects for Civil Engineering and Materials Science and Engineering students.
4. Conducting laboratory classes and design classes in Structural Engineering for Civil Engineering students at Semester 2, Semester 7

Postgraduate Teaching and Research

1. Course: M. Eng / PG. Diploma in Structural Engineering Design/ Department of Civil Engineering
   Subjects: Concrete Technology & Forensic Engineering
   Design of water retaining structures

2. Course: M.Sc./PG. Diploma in Environmental Engineering and Management/ Department of Civil Engineering
   Subject: Design of Water Retaining Structures

3. Course: M.Sc./PG Diploma in Materials Science/ Department of Materials science and Engineering
   Subject: Cement and Concrete Technology

Supervision of PhD/MPhil/M.Sc./ M.Eng. research projects (Completed)

1. Fire Performance of Prefabricated Cellular Lightweight Concrete Panels
   Jointly with Dr. K.M.C. Konthesinghe, Department of Civil Engineering, University of Sri Jayewardenepura, , Dr. Keerthan Poologanathan Dept. of Mechanical and construction Engineering, Northumbria University, Newcastle Upon Tyne, UK
   Dr. Brabha Nagaratnam,, Dept. of Mechanical and construction Engineering, Northumbria University, Newcastle Upon Tyne, UK.
2. Investigation on Alternative Fine Aggregate for Concrete and Masonry
   Jointly with Dr. K.M.C. Konthesinghe, Dept. of Civil Engineering, University of Sri Jayawardanapura,, Dr. H.M.R. Premasiri, Department of Earth Resources Engineering, University of Moratuwa., MPhil
3. Application of Roller compacted concrete for road pavements in Sri Lanka - by T.C. Ekneligoda, March 2002 -MPhil
4. Low cost underground water tanks by V.A.S.P Nanayakkara, October, 2001, M.Sc.
5. Design of Cost effective composite reinforced brickwork – Ferrocement water tanks- by R.A.T.N. Ranawaka, 2003, M.Sc.
6. Use of Grade 25 concrete in Design of Water retaining structures based on BS 8007 recommendations by W.W.Liyanaga, 2004 ,M.Eng.
7. Development of Self Compacting Concrete using Limestone powder by R. Thevakar, 2006, M.Sc.
8. Survey on precast concrete industry in Sri Lanka, Weerasri, KRRD, 2007, M.Eng.
9. Experimental investigation on temperature rise due to heat of hydration, Wannigama, WRK, 2007, M.Eng.
10. Field measurements of early age temperature rise and seasonal temperature variation in concrete, Perera, SKH, 2007, M.Eng.
11. Optimization Of Circular Type Ground Reservoirs, Wickramasinghe, NRS, 2009, M.Eng.
12. Study on optimization of rectangular type ground reservoirs, Pathiranage, UC, 2009
13. Comparison of shell element forces obtained through classical analysis and computer software, Vithanage, SC, 2014, M.Eng.
14. Design of Dowels for shear transfer at the interface between concrete cast at different times: a case study, Karunarathna, SMP, 2015, M.Eng.
15. Significance of solar radiation on concrete water retaining structures, Barthelot, AE, 2015, M.Eng.
16. Development of light weight cement blocks with bottom ash from coal fired thermal power plants, Savitha, R, 2015, M.Sc.
17. Prediction of temperature rise in concrete due to heat of hydration of cement, Mataraarachchi, AIGK, 2016, MPhil.
18. Evaluation of risk of plastic shrinkage cracking in concrete, Weerasinghe, TGPL, 2017, M.Sc.
19. Evaluation of pumpability of high slump concrete, Dilini Perera, 2018, M.Sc

Supervision of PhD research project (Ongoing)

1. “Development of bottom ash-based hybrid cement and concrete” Jointly with Dr. H.P. Sooriyaarachchi, University of Ruhuna, Prof. Shingo Asamoto, Saitama University, Japan.
2. “Web crippling strength and behaviour of cold-formed thin walled channels with web openings” Jointly with Dr. K.M.C. Konthesinghe, Department of Civil Engineering,

University of Sri Jayewardenepura, , Dr. Keerthan Poologanathan Dept. of Mechanical and construction Engineering, Northumbria University, Newcastle Upon Tyne, UK

3. "Development of cost effective limestone calcinated clay cement in Sri Lanka" Jointly with Prof Upali Adikary, Department of Materials Science and Engineering, University of Moratuwa

2.0 RESEARCH AND CREATIVE WORK

3.1 PUBLICATIONS IN REFEREED JOURNALS & PROCEEDINGS OF CONFERENCES

1. I Upasiri, C Konthesingha, A Nanayakkara, K Poologanathan Determination of elevated temperature material properties by ANN-based FE mode Journal of Structural Fire Engineering 2023
2. Arulmoly, Branavan; Konthesingha, Chaminda; Nanayakkara, Anura; Effects of blending manufactured sand and offshore sand on rheological, mechanical and durability characterization of lime-cement masonry mortar, European Journal of Environmental and Civil Engineering.2022,Taylor & Francis
3. Upasiri, Irindu; Konthesingha, Chaminda; Nanayakkara, Anura; Poologanathan, Keerthan; Perampalam, Gatheeshgar; Perera, Dilini; Finite element analysis of lightweight concrete-filled LSF walls exposed to realistic design fire, Journal of Structural Fire Engineering, 2022, Emerald Publishing Limited
4. Arulmoly, Branavan; Konthesingha, Chaminda; Nanayakkara, Anura; Influence of mortars comprised of manufactured sand with offshore sand on the performance of masonry and brick–mortar joint, Innovative Infrastructure Solutions, 2022 Springer International Publishing
5. Upasiri, IR; Konthesigha, KMC; Nanayakkara, SMA; Poologanathan, K; Gatheeshgar, P; Perera, D; Fire performance of lightweight concrete-filled LSF wall panels Structures, 2022, Elsevier
6. Nanayakkara, Anura; Premasiri, Ranjith; Arulmoly, Branavan; Konthesingha, Chaminda; Metamorphic rocks for manufactured sand and coarse aggregate for concrete and mortar Magazine of Civil Engineering, 2022
7. Arulmoly, Branavan; Konthesingha, Chaminda; Nanayakkara, Anura; Effects of microfine aggregate in manufactured sand on bleeding and plastic shrinkage cracking of concrete, Frontiers of Structural and Civil Engineering, Jan, 2022, Higher Education Press
8. Arulmoly, Branavan; Konthesingha, Chaminda; Nanayakkara, Anura; Plastic settlement and hardened state assessments of manufactured sand made concrete for varying microfine levels Structural Concrete, 2022, WILEY-VCH Verlag GmbH & Co. KGaA Weinheim
9. Fonseka, NHIC; Nanayakkara, SMA; Assessment of Concrete Durability by Surface Resistivity and Initial Surface Absorption 12th International Conference on Structural Engineering and Construction Management: Proceedings of the ICSECM 2021, 2022 Springer Nature Singapore Singapore
10. Weerasinghe, Hasini; Konthesingha, Chaminda; Nanayakkara, Anura; Poologanathan, Keerthan; Perampalam, Gatheeshgar; Kanthasamy, Elilarasi; Web Crippling Behaviour of Cold-Formed Carbon Steel, Stainless Steel, and

Aluminium Lipped Channel Sections with Web Openings, Buildings, 2022 MDPI

11. Upasiri, IR; Konthesingha, KMC; Poologanathan, K; Nanayakkara, SMA; Nagaratnam, B; Finite element modelling of wall panels under standard and hydrocarbon fire conditions, ICSECM 2019: Proceedings of the 10th International Conference on Structural Engineering and Construction Management 2021 Springer Singapore
12. Gannoruwa, GKBM; Nanayakkara, SMA; Muthurathna, SSK; Utilization of Textile Waste in Development of Interlocking Paving Blocks for Foot Paths ICSECM 2019: Proceedings of the 10th International Conference on Structural Engineering and Construction Management, 2021 Springer Singapore
13. Upasiri, IR; Konthesigha, KMC; Nanayakkara, SMA; Poologanathan, K; Gatheeshgar, P; Nuwanthika, D; Finite element analysis of lightweight composite sandwich panels exposed to fire, Journal of Building Engineering 2021,Elsevier
14. Arulmoly, Branavan; Konthesingha, Chaminda; Nanayakkara, Anura; Performance evaluation of cement mortar produced with manufactured sand and offshore sand as alternatives for river sand, Construction and Building Materials, 2021, Elsevier
15. Upasiri, Irindu; Konthesingha, Chaminda; Nanayakkara, Anura; Poologanathan, Keerthan; Nagaratnam, Brabha; Perampalam, Gatheeshgar; Evaluation of fire performance of lightweight concrete wall panels using finite element analysis, Journal of Structural Fire Engineering, 2021 Emerald Publishing Limited
16. Upasiri, Irindu; Konthesingha, Chaminda; Nanayakkara, SMAN; Poologanathan, Keerthan; Nagaratnam, Brabha; Perampalam, Gatheeshgar, Evaluation Of Fire Performance Of Lightweight Concrete Wall Panels Using Finite Element Analysis, Journal of Structural Fire Engineering, 2021

17. I.R.Upasiria, K.M.C.Konthesigha, S.M.A.Nanayakkara, K.Poologanathan, P.Gatheeshgar, D.Nuwanthika, Finite element analysis of lightweight composite sandwich panels exposed to fire, Journal of Building Engineering, Volume 40, August 2021.

18. Upasiri, IR; Konthesingha, KMC; Poologanathan, K; Nanayakkara, SMA; Nagaratnam, B; Finite element modelling of wall panels under standard and hydrocarbon fire conditions ICSECM 2019: Proceedings of the 10th International Conference on Structural Engineering and Construction Management, 469-488 2021, Springer Singapore

19. Dilini Perera, K.Poologanathan, M.Gilliea P.Gatheeshgara, P.Sherlock, S.M.A.Nanayakkara, K.M.C.Konthesingha, Fire performance of cold, warm and hybrid LSF wall panels using numerical studies, Thin-Walled Structures, Volume 157, December 2020, 107109

20. Isuri Fonseka, Anura Nanayakkara, “Development of Foam Concrete Blocks with Bottom Ash”, MERCon, 2020

21. Heraji Hansika Anura Nanayakkara, 'Investigation on Properties of Cellular Lightweight Concrete Blocks with Bottom Ash", MERCon, 2019.
22. Gayan Buddhika Illangakoon, Shingo Asamoto, Anura Nanayakkara, Lam Nguyen Trong, Concrete cold joint formation in hot weather conditions, Construction and Building Materials 209 (2019) 406–415.
23. K.A.S.D. Ratnayake, S.M.A Nanayakkara, Effect of Fly Ash on Self-healing of Cracks in Concrete, 4th International Multidisciplinary Engineering Research Conference, MERCon 2018.
24. D.M.S.P.Dassanayake, S.M.A. Nanayakkara, Development of Geopolymer with Coal Fired Boiler Ash, 4th International Multidisciplinary Engineering Research Conference, MERCon 2018.
25. J. A. A. S. Jayasinghe, H. M. Y. C. Mallikarachchi, S. M. A. Nanayakkara3 and W. P. S. Dias, Modelling of Corrosion Induced Cover Cracking in Concrete with Exposed Reinforcement, 4th International Multidisciplinary Engineering Research Conference, MERCon 2018.
26. S.U. Hendawitharana, S.M.A. Nanayakkara, Use of Bottom Ash from Coal Fired Thermal Power Plants in Production of Cellular Lightweight Concrete, 4th International Multidisciplinary Engineering Research Conference, MERCon 2018.
27. Shingo Asamoto, Kohki Murano, Isao Kurashige, Anura Nanayakkara, Effect of carbonate ions on delayed ettringite formation, Journal of Construction and Building Materials 147:221-226 · August 2017.
28. H.G.P. Gamalath, T. G. P. L. Weerasinghe, S.M. A. Nanayakkara Use of Waste Rubber Granules for the production of Concrete Paving Blocks, 7thInternational Conference on Sustainable Built Environment (ICSBE2016).
29. A.W.R.M.G.W.D.B. Girihagama,, S.M.A Nanayakkara, Early Age Thermal Crack Control in Mass Concrete, 7th International Conference on Sustainable Built Environment (ICSBE2016).
30. T. G. P. L. Weerasinghe, S.M. A. Nanayakkara, Modelling of Early Age Tensile Strain Development of Fresh Concrete, ENGINEERING RESEARCH CONFERENCE. MORATUWA. MERCon 2016
31. Shingo Asamoto, KohikiMurao, Isao Kurashigee, Anura Nanayakkara "Investigation into Effect of Mineral admixtures on Delayed Entringite Formation", p 351- 356, The 4th International Symposium on Engineering, Energy and Environment, November 2015, Thammasat University, Thailand.
32. T. G. P. L. Weerasinghe, S.M. A. Nanayakkara, Determination of Tensile Strain Capacity of Fresh Concrete: A new test method, 6th International Conference on Structural Engineering and Construction Management 2015, Kandy, Sri Lanka, 11th-13th December 2015.
33. AIGK Mataraarchchi, R Sayanthan, S.M.A Nanayakkara, "An Experimental Investigation on Thermal Properties of Immature Concrete", p 17-24, 6th

International Conference on Structural Engineering and Construction Management 2015, Kandy, Sri Lanka, 11th-13th December 2015.

34. W.A.C.Prabhath, M.Parththeeban, U.N.D.Perera, S.M.A.Nanayakkara, Experimental Investigation on Thermal Properties of Concrete, Proceedings of the 5th International Conference on Structural Engineering and Construction Management, December 2014.
35. AMAN Karunarathne, WK Mampearachchi, SMA Nanayakkara, Non Dowel Joint Spacing for Low Volume Roads in Tropical Climate-A case study in Sri Lanka, International Journal of Pavement Research and Technology, Volume 7, Issue 1, Pages 49-59,2014.
36. Anura Nanayakkara, Chanaka Prabhath, Parththeeban Murugathasan, ,Dilrangi Perera, "Experimental Investigation on Thermal Properties of Concrete", pp. 151-159 Proceedings of the 5th International Conference on Structural Engineering and Construction Management, December 2014.
37. R. Sayanthan, S. Ilamaran, M. Rifdy, SMA Nanayakkara, Development of Interlocking Light weight Blocks, Proceedings of the 4th International Conference on Structural Engineering and Construction Management, December 2013.
38. RRC Piyasena, PATS Premerathne, BTD Perera, SMA Nanayakkara Evaluation of Initial Setting Time of Fresh Concrete, National Engineering Conference 2013, 19th ERU Symposium, Faculty Of Engineering, University Of Moratuwa, Sri Lanka.
39. A.I.G.K. Mataraarachchi, S.M.A. Nanayakkara, Shingo Asamoto, Control of thermal cracking in concrete water retaining structures, Proceedings of second annual sessions, Society Structural Engineers, Sri Lanka, 2012.
40. S.M.A. Nanayakkara, Cracking in Concrete Structures due to Delayed Ettringite Formation, Transactions of Society Structural Engineers, Sri Lanka, 2011.
41. S.M.A. Nanayakkara, Importance of controlling temperature rise due to heat of hydration in massive concrete elements, IESL-SSMS Joint International Symposium on Social Management Systems 2011, 14th – 16th September, Colombo, Sri Lanka.
42. W.K. Mampearchchi, J.V. Kosgolla, S.M.A. Nanayakkara, Development of economical high early strength concrete mix for paving of provincial roads in Sri Lanka, Engineer, V0l. xxxxIV, No.02, April 2011, pp. 01-10.
43. T. Mathanraj, B. Senthil, S. Gogulan and S.M.A. Nanayakkara, Effects of Fines in Quarry Dust on Properties of Mortar and Concrete, Annual Transactions of IESL, pp.43-50, 2011.
44. V. Jatheeshan, T. N. U. Peiris, L. B. S. K. Mendis and S. M. A. Nanayakkara Investigation of the Effects due to Formation of Cold Joint in Concrete, Annual Transactions of IESL, pp.51-56, 2011.
45. A.M.A.N. Karunarathne, S.M.A. Nanayakkara and W.K. Mampearachchi,

Experimental Investigation of LTE in Relation to Crack Width of Non-Dowelled Joints in Concrete Pavements, Annual Transactions of IESL, pp.22-26, 2011.

46. Konthesingha KMC, Jayasinghe C, Nanayakkara SMA, Bond and Compressive strength of Masonry for Locally Available Bricks, Engineer , Vol. XXXX, No. 4. Pp 7-13, 2007.
47. Dias, WPS, Seneviratna, GAPSN, Nanayakkara, SMA, Offshore sand for Reinforced concrete, Construction and Building Materials, 2007
48. Nanayakkara SMA, Nanayakkara V.A.S.P., New Composite Construction Material for Low Cost Underground Water Tanks, "Engineer" Journal, IESL, 2006.
49. Nanayakkara SMA**,** Elakneshwaran T, Self-healing of cracks in concrete with Portland limestone cements, Proceedings of 6th International congress in Concrete technology, 2005, pp. 675-683.
50. R. Thivakar, Nanayakkara SMA, Development of self compacting concrete using limestone powder, IESL Transactions, 2004
51. Nanayakkara S.M.A, Liyanage W.W. , Use of Grade 25 concrete in Design of Water Retaining Structures Based on BS 8007 Recommendations , IESL Transactions, 2003, pp 1-8.
52. Nanayakkara S.M.A. Wannigama W.R.K. ,Experimental Investigations on Temperature rise due to heat of Hydration, IESL Transactions, 2003, pp. 9-15.
53. Weerasiri, Renuka. K.R., Nanayakkara S.M.A, Survey on the Precast Industry in Sri Lanka", IESL Transactions, 2003, pp. 32-37
54. Nanayakkara S.M.A. and T.C. Ekneligoda, Experimental Investigations on Properties of Roller Compacted Concrete, IESL Transactions, 2003, pp. 131-138.
55. Nanayakkara S.M.A, Self-healing of cracks in Concrete under water pressure, International Symposium on New Technologies for Urban safety in Mega Cities, Tokyo, October, 2003. pp 125-132.
56. WPS Dias, Nanayakkara SMA, TC Ekneligoda, Performance of concrete mixes with OPC-PFA blend, Magazine of Concrete Research, Vol.55, No. 2 April 2003.
57. Ekneligoda TC, Nanayakkara SMA, Design of roller compacted concrete mixes for road pavements, Proceedings of 7th Annual symposium of ERU , University of Moratuwa, 2001.
58. Nanayakkara, S.M.A., An Experimental Method to Determine the Thermal Conductivity of Concrete, International Conference on Advanced Technologies in Design, Construction and Maintenance of Concrete Structures, Hanoi, Vietnam , March 2001.

59. Nanayakkara, S.M.A. Prediction of Compressive strength of Concrete, Engineering Research Unit Symposium, University of Moratuwa, December

2000.

60. Nanayakkara, S.M.A,: Alternatives for river sand, IABSE Colloquium on Concrete Model Code for Asia, Puket, 1999.
61. Anura SM Nanayakkara, Kazumaza Ozawa, Koichi Maekawa, :Deformational resistance of fresh concrete Through bent and tapered pipes, Proceedings of JSCE No. 466/V-19, 1993, pp 97-107.
62. Kazumasa Ozawa, Anura SM Nanayakkara, Maekawa Koichi, Application of Multi-phase Model to the pipe flow of fresh concrete, Proceedings of JSCE No. 466/V-19, May 1993, pp 121-131.
63. Koichi Maekawa, Kazumasa Ozawa, Anura SM Nanayakkara: Multi-Phase Model for Flow of Liquid-Solid assembly through pipelines, Proceedings of JSCE No. 466/V-19, 1993, pp 109-120.
64. Anura Nanayakkara, Ozawa, K., Maekawa, : Deformational compatibility for solid phase of dense solid-liquid flow in bend pipe, Proceedings of JSCE, No 426/V-14, 1991 pp 221-232.
65. Anura Nanayakkara, Ozawa, K., Maekawa: Deformational compatibility of aggregate phase for tapering flow of dense liquid-solid material, Proceedings of JSCE, No. 420/V-13, 1990, pp 279-290.
66. Nanayakkara A, Gunatilaka D, Ozawa K, Maekawa K, Flow and seggrgation of fresh concrete in tapered pipes- Two phase computational model, Proceedings of ASME, FED Vol. 75, 1988, pp 47-52.
67. K.Ozawa, A. Nanayakkara, K. Maekawa, Flow and segregation of fesh concrete around bifurcation in pipe lines, Proceeding of ASME, FED Vol.75, 1988, pp139-144.
68. Maekawa, K., Ozawa, K., Nanayakkara, A.,: Solid stiffness model for analysis of fresh concrete flow: Gravel, Sand and Cement slurry mixture, Proceedings of the ASME, FED – Vol. 118, 1991, pp 39-44 .
69. Kazumasa Ozawa, Anura Nanayakkara, Koichi Maekawa, Evaluation of aggregate particle motion in liquid-solid flows of model concrete, Proceeding of JSCE No. 408/V-11, August 1989, pp 187-193.
70. Kazumaza Ozawa, Anura Nanayakkara, Koichi Maekawa, Flow and segregation behaviour of a two phase model concrete around bifurcation pipe lines, Proceedings of JSCE, No. 408/V11, August 1989, pp 195-203.

2.2 RESEARCH PUBLICATIONS IN NON-REFEREED JOUNALS

1. Nanayakkara, S.M.A., Gerry Byrne, : Offshore sand- an Alternative to River sand in the Construction Industry, Constructor, Volume 7, No.2, 2002, pp.121-122.
2. Nanayakkara, SMA, Design for controlled cracking of water retaining structures based on BS 8007. Proceedings of the seminar on design and construction of water retaining structures, July 1999.

3. Nanayakkara Anura, Construction Industry and Concrete Engineering in Sri Lanka, Proceedings of JCI Symposium on Concrete Model Code for Asia, Japan, April 1994.
4. Nanayakkara Anura, : Concrete pumping, Modulus, Vol.2 No.1, Society of Structural Engineers, Sri Lanka, April, 1991.

3.2 PRESENTATIONS AT CONFERENCES, MEETINGS OF PROFESSIONAL ASSOCIATIONS ETC.

1. "Issues related concrete construction materials", , Society of Structural Engineers, Sri Lanka, August 2023
2. “Temperature control requirements at early age for mass concrete elements”, , Society of Structural Engineers, Sri Lanka, March 2022
3. “Alternative construction Materials” Digital Annual conference – Bounce Back Disasters and Opportunities 2020, Organization of Professional Associations of Sri Lanka (OPA)
4. Resource person, Seminar on Supply of Sand for Construction Work, , Chamber of Construction Industry Sri Lanka, August 2018
5. "Issues in reinforced concrete construction", , Society of Structural Engineers, Sri Lanka, March 2018
6. “Issues related to Materials and workmanship in projects”, Seminar conducted for Engineers attached to New Kalani bridge project, November 2018
7. “Cement properties associated with thermal control of concrete and Ready-mix concrete design mixes” Seminar conducted for Access Civimech Engineers, September, 2018
8. "Issues related high strength concrete", Society of Structural Engineers, Sri Lanka, March 2017
9. "Detrimental effects of excessive temperature rise in concrete", , Society of Structural Engineers, Sri Lanka, August 2016.
10. Resource person, Concrete Technology Course for Professionals in Ready Mix Concrete Industry,
11. Resource person, Workshop on regulating of river sand mining with the assistance of Sri Lanka water partnership (SLWP) for regulating bodies-September 2015, ICTAD
12. Committee member for publication of Alternatives for River Sand Report, CIDA, 2015
13. Resource person, Seminar on Water retaining structures and water proofing-February 2015.
14. “Sri Lanka Standards for cements and aggregates”, Presented at the seminar organized by Chamber of Construction Industry, Sri Lanka, 2011
15. “Self Compacting Concrete”, Presented at the International Seminar on “ New Trends in Concrete Construction”, IESL, 2006
16. “Sea sand as an Alternative to River sand in the construction Industry”, Presented at the workshop on environmental sustainability of sea sand mining as an alternative to river sand mining in Sri Lanka, SLAAS, 2006.
17. “Corrosion of steel in concrete structures”, Presentation at the seminar on

Rehabilitation of Concrete structures, CCI, 2005

18. "Use of Concrete in Construction", Presentation at the seminar on Construction Materials, organized by the Sri Lanka Association for the Advancement of Science, 2005
19. "Roller compacted roads for low volume roads", Presented at the seminar on cost effective solution for low volume rural roads, SLAAS, 2005
20. "Alternatives for river sand in Sri Lanka", Seminar on Alternatives for river sand as fine aggregates, ICTAD ,2004
21. "Alternatives to river sand for construction purposes", Presentation at the seminar organised by the Chamber of Construction Industry, Sri Lanka,(CCI), 2004
22. "Engineering properties of River sand Alternatives", Presentation at the seminar on Alternatives to river sand, National Science Foundation, 2003
23. "Watertightness of Cement mortar and concrete", Presentation at the seminar on water proofing, ICTAD, 2003
24. "Application of Blended cements", Presented at the workshop on the application of Blended cement in the construction industry and development of Sri Lanka Standard, SLSI, 2002
25. "Basic properties of concrete and concrete durability", Presentation at the National Seminar on Non-destructive testing of concrete in structures, Atomic Energy Authority, 2001
26. "A new composite construction material for low cost underground water tank"VASP Nanayakkara, SMA Nanayakkara, Duleep Goonewardene, , SLAAS ,Proceedings of the 57th Annual session, 2001
27. Anura Nanayakkara et al , Overview of the materials and construction part of Asian Concrete Model Code, The 4th ACI/KCI International Conference, 2000
28. "Water retaining Structures" , Presentation at Question Time of the Society of Structural Engineers, Sri Lanka, 1997
29. SMA Nanayakkara, Engineering properties of river sand alternatives, Seminar on alternatives for river sand, ICTAD, May 1997.
30. Anura Nanayakkara, Comments on proposed frame work and contribution towards the concrete model code for Asia, Symposium on Concrete Model Code for Asia, Bangkok, 1994
31. SMA Nanayakkara, : Theory of Mix Design, Proceedings of seminar on Ready Mixed Concrete, Society of Structural Engineers, Sri Lanka, February 1993.

3.3 OTHER PUBLICATIONS
(Monographs/ Research Reports/Discussion Papers):

1. Report on "Review of Structural Design of Rapid Sand Filter House of Chilaw Water Treatment Plant", April 2012.
2. Co-author of the report on "Investigation of pile cap cracking – Southern Transport Development Project", July 2009.
3. Co-author of the report on "Environmental, Economic and Regulatory Matters Connected with Sand and Clay Mining" Report submitted to Ministry of Environment & Natural Resources, 2005.
4. Co-author of the report on "Developing an inorganic polymer concrete material for walling units" Report submitted to Strongwall International Limited, Australia, February 2004.
5. Co-author of the report on " Suitability of Offshore sand , Manufactured sand and Quarry dust for concrete and Plastering work ", Report submitted to CCD, Coastal Resources Management Project, 2002.
6. Co-author of the report on "Alternatives for river sand" report submitted to Coast conservation department, CCD, 2002
7. Co-author of the report on "Low cost underground water tanks". Report submitted to the NWSDB, 2001
8. Co-author of the report on " Properties of PFA blended cement in Concrete", Report submitted to Puttalam Cement Company Limited, January 2000.
9. Co-author of the report on "Alternatives for river sand" , Report submitted to the Central Environmental Authority of Sri Lanka, August 1997.
10. Co-author of the report on "Identification of Engineering based investment priorities for medium term development plan" Report presented at IESL Annual Sessions Workshop, 1995.

3.0 DISSEMINATION OF KNOWLEDGE AND CONTRIBUTIONS TO UNIVERSITY AND NATIONAL DEVELOPMENT

3.1 SERVICES OUTSIDE UNIVERSITY

.

- Chairman, Evaluation Panel for Degree Evaluation: IESL Recognition of Bachelor of the Science of Engineering Honours in Civil & Environmental Engineering Degree Program, University of Jaffna. 2023
- Member, Evaluation Panel for Degree Evaluation: IESL Recognition of Bachelor of the Science of Engineering Honours in Civil Engineering Degree Program, General Sir John Kotelawala Defence University (KDU), 2022
- Consultant, National Building Research Organization
- Chairman, Sectoral Committee on Building and Construction Materials (SC 35), Sri Lanka Standards Institution.2013 to 2019
- Member of the Permit Committee, Sri Lanka Standards Institution.

- Member, Board of Management, ITUM, 2013 to 2020
- Member of the Accreditation Committee for certification Bodies, Sri Lanka Accreditation Board (SLAB)
- Project Manager (Engineering), Relocation and development of ITUM project, 2015-2017.
- Committee member of International Scientific Committee, 5th International Symposium on Advances in Civil and Environmental Engineering Practices for sustainable development, 2017 (ACEPS -2017).
- Co-chair of the 10th International Conference on Structural Engineering and Construction Management 2019.
- Co-chair of the 9th International Conference on Sustainable Built Environment, 2018.
- Co-chair of the 8thInternational Conference on Structural Engineering and Construction Management (ICSBE2017)
- Co-chair of the 7th International Conference on Sustainable Built Environment, 2016 (ICSBE2016).
- Co-chair of the 6thInternational Conference on Structural Engineering and Construction Management, 2015
- Committee member for publication of Alternatives for River Sand Report, CIDA, 2015
- Chairman, working group on revision of cement standards, Sri Lanka Standards Institution.
- Chairman, working group on revision of Sri Lanka Standards for concrete non-pressure pipes, Sri Lanka Standard Institution
- Member of the working group on National Annex for EC2, Sri Lanka Standards Institution
- Chairman, working group on Sri Lanka Standard specifications for concrete paving blocks.
- Member of Technical Advisory Committee on Mechanical Testing, Sri Lanka Accreditation Board, 2006.
- Consultant, Institutional Strengthening Component, Coastal Resources Management Project, Coast Conservation Department
- Chairman, working group on Sri Lanka Standard specifications for Hot dipped Aluminium-Zinc alloy coated steel sheets for roofing and claddings
- Chairman, working Group on Cement Testing Methods, Sri Lanka Standards Institution.
- Chairman, working group on Sri Lanka Standard specifications for blended cements, Sri Lanka Standard Institution.
- Member of the Sub-Committee on Alternatives for River sand, Ministry of Fisheries and Ocean Resources.
- Chairman, working group on Amendments to Cement standards, 2006

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International Organizations

- Member of the advisory committee of the 3rd ACF Symposium organized by Asian concrete Federation, 2019
- Member of the technical committee of the 5th International Symposium on New Technologies for urban safety of Mega Cities in Asia- 2006

- Member of the Technical committee of the 3rd International Symposium on New Technologies for Urban safety of Mega Cities in Asia. 2004.
- Member of the Scientific committee of the First International Conference organized by the Asian Concrete Federation, 2004
- Member of the Technical Advisory Committee, Second International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, 2003
- Member of the technical advisory committee of the 2nd International Symposium on New Technology for urban safety of Mega cities in Asia, 2003
- Coordinator, Working Group 2 – Materials and Construction, Asian Concrete Model Code. (2000-2002)
- Member of the Executive Council of International Committee on Concrete Model Code for Asia (2000-2002)
- Member of the International Scientific and Technical Committee of First International Structural Engineering and Construction Conference (ISEC-01), 2001.
- Member of International Scientific Committee of the ICCMC/IBST International conference on Advanced Technologies in Design, Construction and Maintenance of Concrete Structures, 2001
- Chairman of the organizing committee of the International conference on Concrete Model code for Asia, 2001
- Chairman of the Organizing committee of the International Symposium on Asian Concrete Model Code, held in Colombo, March 2000.
- Member of the International Advisory Committee of IABSE (International Association for Bridge Structural Engineering) Colloquium on Concrete Model Code for Asia, 1999.
- Member of the International Committee on Concrete Model Code for Asia (1992-2001)
- Referee for ASCE Journal of Materials in Civil Engineering
- Referee for Construction and Building materials Journal

3.2 AWARDS

1. AIEJ (Association of International Education, Japan) Research Fellowship, 1999
2. Best article in the Modulus (Society of Structural Engineers, SL), 2000
3. " Sanstha" Merit Award for Research, 2001
4. Award for Appreciation of Outstanding Research Performances, University of Moratuwa- 2003
5. Holcim Merit award for research, 2004
6. Commonwealth Academic Fellowship, 2004
7. Award for Appreciation of Outstanding Research Performances, University of Moratuwa, - 2004
8. Award for Appreciation of Outstanding Research Performances, University of Moratuwa- 2005
9. Anton Award – Best technical paper on "Water related infrastructure", IESL-

2006

10. President's Awards for Scientific Research - 2010
11. Award for Appreciation of Outstanding Research Performances, University of Moratuwa - 2015
12. Award for Appreciation of Outstanding Research Performances, University of Moratuwa– 2016
13. Award for Appreciation of Outstanding Research Performances, University of Moratuwa– 2017
14. President's Awards for Scientific Research – 2017
15. Gold Medal for the best paper (Co-author), Society of Structural Engineers Sri Lanka, Annual Sessions 2018

3.3 Patents

Invention: A highly permeable and energy absorbing paving block made from polyester spandex fabric waste jointly
Patent holder jointly with NBRO