CURRICULUM VITAE OF PROF. AMAR NATH NAYAK

Name : Prof. (Dr.) Amar Nath Nayak

Designation : Professor

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Date of Birth: 11-05-1964

Sex : Male

Marital Status: Married

Nationality : Indian

Educational Qualification:

- Ph.D. in Civil Engineering from **Indian Institute of Technology, Kharagpur** in 2003.
- M. Tech in Civil Engineering with Structural Engineering Specialization from **Indian Institute of Technology, Kharagpur** in 1995.
- B. Sc. Engg. (Hons.) in Civil Engineering from **Indira Gandhi Institute of Technology, Sarang**, Odisha (**Utkal University, Bhubaneswar**) in 1987.

Teaching Experience: 35 years

- Principal, KMBB College of Engineering and Technology, Bhubaneswar, Khurda (1st Aug. 2024 – till date)
- Professor, Veer Surendra Sai University of Technology, Burla, Odisha, India (16th Feb. 2006 –31st May 2024) – **More than 18 years**
- Asst. Professor, Indira Gandhi Institute of Technology, Sarang, Odish, India (13the Dec. 1997 – 15th Feb. 2006)
- Sr. Lecturer, Indira Gandhi Institute of Technology, Sarang, Odisha (20th Sept. 1995 – 12th Dec.12.1997)
- Lecturer, Indira Gandhi Institute of Technology, Sarang, Odish (20th Sept. 1989 – 19th Sept. 1995)

Administrative Experience:

- Principal, KMBB College of Engineering and Technology, Bhubaneswar, Khurda (1st Aug. 2024 – till date)
- Dean, Academic Affairs, VSSUT, Burla for 03 years 03 months (Aug. 07, 2011-Nov. 13, 2014)
- Dean, Post Graduate Studies & Research, VSSUT, Burla for 03 years 03 months (Aug. 07, 2011-Nov. 13, 2014): Additional Charge
- Dean, Sponsored Research and Industrial Consultancy (SRIC), VSSUT, Burla for 03 years 01 month (Jul. 20, 2015 to Aug. 24, 2018)
- Director, Internal Quality Assurance Cell (IQAC), VSSUT, Burla (July 25, 2023 – May 15, 2024)
- Head of Department, Civil Engineering, VSSUT, Burla for 2 terms of total 03 years 04 months (Aug. 01, 2006-July 31, 2008 and July 08, 2015-Nov. 16, 2016)
- Member, Board of Management (Highest Executive Body), VSST Burla for 2 terms of 3 years each (Nov. 2011-Nov. 2014 and Nov. 2018 –Nov. 2021)
- Member Syndicate (Highest Executive Body), Sambalpur University, Jyoti Vihar, Sambalpur for 2 years 06 months (May 2016-Dec. 2018).
- Member Syndicate (Highest Executive Body), Gangadhar Meher University, Sambalpur from June 2020 to Dec. 2020.
- Member, Board of management (Highest Executive Body), Parala Maharaja Engineering College, Berhampur (July 23, 2023- till date).
- President, Saraswati Shishu Vidya Mandir, Burla for 06 years (Aug 2010 to Dec. 2016).
- Coordinator, Technical Education Quality Improvement Programme, VSSUT, Burla, MHRD, Govt. of India for 2 terms (Oct. 2011-June 2012 & Sept. 2019- May 2024)
- Chairman, Hostel Management Committee, VSSUT, Burla for 02 years (Feb. 01, 2008-Jan. 31, 2010)
- Chairman, Civil Maintenance, VSSUT, Burla for 02 years (Feb. 16, 2006-Feb. 18, 2008)

- Coordinator, State Technical Agency (STA), VSSUT, Burla for scrutiny of PMGSY Roads and Bridges of Govt. Odisha and Govt. of Chhattisgarh under Ministry of Rural Development, Govt. of India for 17 years 06 months (Dec. 04, 2006 – 31/05/2024)
- Chairman, Tender Committee, Sambalpur University, Sambalpur for 01 year 03 months (June 17, 2016 – Sept. 30, 2017)
- Member Convenor, Academic Council (Highest Academic Body), VSSUT, Burla for 03 years 03 months (Aug. 07, 2011-Nov. 13, 2014)
- Member, Academic Council (Highest Academic Body), VSSUT, Burla for 05 years 01 month (Aug. 2009 – July 2011 & July 2015-Aug. 2018)
- Member, Academic Committee (Highest Academic Body), College of Engineering & Technology, Bhubaneswar from Dec. 01, 2017 to **till date**.
- Member, Examination Committee, VSSUT, Burla for 3 terms of total 06 years 07 months (Aug. 01, 2006-July 31, 2008, Aug. 07, 2011-Nov. 13, 2014 and July 08, 2015-Nov. 16, 2016)
- Member, Internal Quality Assurance Cell (IQAC), VSSUT, Burla from Dec. 22, 2016 to Aug. 24, 2018.
- Chairman, Industry Institute Interaction Cell, VSSUT, Burla for 03 years 01 month (July 07, 2015- Aug. 24, 2018)
- Member, University Committee for Prospective Planning, VSSUT, Burla from Feb. 2015 to May 2024.
- Member, Central Purchase Processing Committee (CPPC), VSSUT, Burla from July 2018 to July 2021.
- Member, Research Programme Committee (RPC), VSSUT, Burla for 03 years (March 12, 2011 – March 11, 2014).
- Chairman, Board of Studies for Civil Engineering, VSSUT, Burla for 2 terms of total 03 years 04 months (Aug. 01, 2006-July 31, 2008 and July 08, 2015-Nov. 16, 2016)
- Chairman, Conducting Board of Examinations for Civil Engineering for 2 terms of total 03 years 04 months (Aug. 01, 2006-July 31, 2008 and July 08, 2015-Nov. 16, 2016)
- Chairman/Member, Departmental Academic Committee (DAC), Civil Engineering, VSSUT, Burla for 06 years (July, 2012- Dec. 2015, Dec. 2016- June 2017 and July 2017 – June 2018)

- Member, Selection Committee for faculty and officers in various Universities and Govt. Institutions for more than 40 committees.
- Member of various Selection Committee, Odisha Public Service Commission (OPSC) for selection of faculty members and officers of Govt. of Odisha
- Chairman/Member of more than 200 numbers of other committees at VSSUT, Burla

Subject Teaching:

- **Under Graduate Level:** Structural Analysis-I, Structural Analysis – II, Concrete Structures, Steel Structures, Advanced Structural Design, Structural Dynamics and Earthquake Engineering and Pre-Stressed Concrete.
- **Post Graduate Level:** Advanced Structural Analysis, Finite Element Method, Structural Dynamics, Composite Materials and Structures, Shell Structures.

Specialization: Structural Engineering

Research Area:

Vibration and buckling of laminated composite Plates and Shells with/without stiffeners, Finite Element Analysis, Production of Sustainable Concrete utilizing waste materials, Retrofitting of Concrete Structures using FRP sheet and bars.

Research Publications:

1. Sinha, Leena, Nayak, R.N., **Nayak, A. N.** (2025). "Free vibration and buckling analysis of laminated composite plates with cutouts of complicated shapes." **International Journal of Structural Engineering, Inder Science (ESCI, IF-0.4)** (In Press).

2. Parida, K., Satpathy, L., **Nayak, A. N.,** Amat, M. K. (2025). "Use of machine learning models for prediction of compressive strength of concrete produced with waste materials." **Innovative Infrastructure Solutions, Springer (ESCI, IF-2.4)**. https://doi.org/10.1007/s41062-025-02266-6

3. Parida, K., Satpathy, L., **Nayak, A. N.** (2025). "Use of optimized machine learning tool for predicting compressive strength of concrete." **Asian Journal of Civil Engineering, Springer (Scopus)**. https://doi.org/10.1007/s42107-025-01463-z

4. Sinha, L., **Nayak, A. N.** (2025). Effect of cut-out on natural frequency of laminated composite stiffened plates." **International Journal of Structural Stability and Dynamics, World Scientific Publisher (SCIE, IF-3.4)**. https://doi.org/10.1142/S0219455426502895

5. Dutta, B., Ojha, J., **Nayak, A. N.** (2025). "Shear retrofitting of RC beams: A comparative study between externally bonded and deep embedded FRP techniques." ***Structures*****, Elsevier (SCI, IF- 4.3),** Vol. 71, Jan 2025, 107948. https://doi.org/10.1016/j.istruc.2024.107948

6. Patel, G., Sinha, L., **Nayak, A. N.** (2024). "Buckling behaviour of laminated shell panels under linearly variable edge load*." **International Journal of Structural Stability and Dynamics*****, World Scientific Publisher (SCIE, IF-3.4)**, Jun. 2024 https://doi.org/10.1142/S0219455425500907.

7. Dutta, B., **Nayak, A. N.**, Dirar, S., Nanda, B., Theofanous, M. (2023). "Nonlinear finite element investigation on shear behaviour of simply supported and continuous RC T-beams retrofitted with deep embedded CFRP/steel bars." ***Canadian Journal of Civil Engineering*** **(SCI, IF-1.3),** Oct. 2023. https://doi.org/10.1139/cjce-2022-0267.

8. Chanda, S.S., Patel, S. K., **Nayak, A. N.**, Mohanty, C. R. (2023). "Performance evaluation on bond, durability, micro-structure, cost effectiveness and environmental impacts of fly ash cenosphere based structural lightweight concrete." ***Construction and Building Materials,*** **Elsevier (SCIE, IF- 8.0),** Vol. 397, Sep. 2023, 132429. https://doi.org/10.1016/j.conbuildmat.2023.132429

9. Dutta, B., **Nayak, A. N.**, Dirar, S., Nanda, B., Theofanous, M. (2023). "Shear strengthening of continuous RC T-beams with deep embedded CFRP and steel bars: A numerical study." ***Structures,*** **Elsevier (SCI, IF- 4.3),** Vol. 52, June 2023,187-204. https://doi.org/10.1016/j.istruc.2023.03.157

10. Dutta, B., Kumari, A., **A. N. Nayak, A. N. (2022).** "Shear behaviour of RC deep beams retrofitted with externally bonded GFRP fabrics: Experimental and numerical study," ***Structures*****, Elsevier (SCI, IF- 4.3),** Vol. 46, Dec. 2022, pp. 1-16. https://doi.org/10.1016/j.istruc.2022.10.042

11. Lenka, B. P., Majhi, R. K., Singh, S., **Nayak, A. N. (2022) "**Eco-friendly and cost-effective concrete utilizing high-volume blast furnace slag and demolition waste with lime," ***European***

Journal of Environmental and Civil Engineering**,** VOL. 26 (11), Mar. 2021, pp. 5351–5373. **(SCI, IF - 2.3).** https://doi.org/10.1080/19648189.2021.1896581

12. Patel, G. **Nayak, A.N. (2022).** "Buckling behaviour and design aids of cylindrical panel subjected to uniform in-plane loading," ***International Journal of Structures*****,** Vol. 12 (4), Aug 2022, pp. 321-339 **(ESCI, IF-0.4)**. https://doi.org/10.1504/IJSTRUCTE.2022.126184

13. Dutta, B., **Nayak, A.N.,** Nanda, B., Dirar, S. (2022). "Reinforced concrete deep beam shear retrofitted with deep embedded bars: A numerical investigation," ***Materials Today: Proceedings*****,** Vol. 60, Jan 2022, pp. 281-287 **(Scopus)**. https://doi.org/10.1016/j.matpr.2021.12.563.

14. Majhi, R.K., Swain, R. B., **Nayak, A. N. (2021). "**Structural Performance of RC beams containing high-volume ground granulated blast furnace slag and recycled coarse aggregate with lime," ***Construction and Building Materials,*** Vol. 307, Nov 2021, 124907 **(SCI, IF- 8.0),** https://doi.org/10.1016/j.conbuildmat.2021.124907.

15. Sinha, L. Tripathy, A., **Nayak, A. N.**, Sahu, S. K. (2021). Free vibration behaviour of angle-ply laminated composite stiffened plates. ***International Journal of Structural Stability and Dynamics*****, World Scientific Publisher (SCIE, IF-3.4),** Vol. 21 (13), Sept 2021, 2150187. https://doi.org/10.1142/S021945542150187X.

16. Majhi, R. K., Patel, S. K., **Nayak, A. N.** (2021). Sustainable structural lightweight concrete utilizing high-volume fly ash cenosphere. ***Advances in Concrete Construction: An International Journal,*** **Techno Press (SCIE, IF-1.8)**, Vol. 12 (3), Sept 2021, 251-270. https://doi.org/10.12989/acc.2021.12.3.257.

17. Majhi, R. K., Padhy, A., **Nayak, A. N.** (2021). Performance of structural lightweight concrete produced by utilizing high volume of fly ash cenosphere and sintered fly ash aggregate with silica fume. ***Cleaner Engineering and Technology*****, Elsevier (SCIE, IF-6.5),** Vol. 3, Volume 3, July 2021, 100121. https://doi.org/10.1016/j.clet.2021.100121.

18. Patel. G., **Nayak, A. N.**, Srivastava, A. K. L. (2021). Dynamic instability analysis and design charts of curved panels with linearly varying periodic in-plane load, ***International Journal of Structural Stability and Dynamics*****, World Scientific Publisher (SCIE, IF-3.4)**, Vol. 21 (9), June 2021, 2150130. https://doi.org/10.1142/S0219455421501303

19. Patel, G., **Nayak, A. N.** (2021). Static stability analysis and design aids of curved panels subjected to linearly varying in-plane loading. ***Journal of Institution of Engineers (India)-Series A*, Springer (Scopus)**, Vol. 102 (2), Feb. 2021, 565-589. https://doi.org/10.1007/s40030-021-00517-0.

20. Kagan Sogut, K., Dirar, S., Theofanous, M., Asaad Faramarzi, A., **Nayak, A. N.** (2021). Effect of transverse and longitudinal reinforcement ratios on the behaviour of RC T-beams shear-strengthened with embedded FRP BARS. ***Composite Structures*, Elsevier (SCI, IF-7.1)**, Vol. 262, 15 Apr. 2021, 113622. https://doi.org/10.1016/j.compstruct.2021.113622.

21. Kumari A., **Nayak, A. N.** (2021). An Experimental approach for strengthening of RC deep beams with web openings using GFRP fabrics and gas actuated fasteners. ***Journal of Building Engineering*, Elsevier (SCI, IF-7.4)**, Vol. 35, Mar. 2021, 102027. https://doi.org/10.1016/j.jobe.2020.102027.

22. Sinha, L., Das, D., **Nayak, A. N.**, Sahu, S. K. (2021). Experimental and numerical study on free vibration characteristics of laminated composite plate with/without cut-out, **Composite *Structures*, Elsevier (SCI, IF-7.1),** Vol. 256, 15 Jan. 2021, 113051. https://doi.org/10.1016/j.compstruct.2020.113051.

23. Sinha, L., Jena, T., **Nayak, A. N.** (2021). Forced vibration analysis of laminated composite stiffened plates. ***International Journal of Structural Engineering*, Inder Science (ESCI, IF-0.4),** Vol. 11 (2), Dec 2020, 173–188. https://doi.org/10.1504/IJSTRUCTE.2021.114263.

24. Kumari, A. Nayak, A. N. (2021). Strengthening of shear deficient RC deep beams using GFRP sheets and mechanical anchors, ***Canadian Journal of Civil Engineering* (SCI, IF-1.3)**, Vol. 48 (1), Jan. 2021, 1-15. https://doi.org/10.1139/cjce-2019-0333.

25. Majhi, R. K., **Nayak, A. N.**, Mukharjee, B. B. (2020). Characterization of lime activated recycled aggregate concrete with high-volume ground granulated blast furnace slag, ***Construction and Building Materials*, Elsevier (SCIE, IF-8.0),** Vol.259.23 June 2020, 119882. https://doi.org/10.1016/j.conbuildmat.2020.119882.

26. Majhi, R. K., **Nayak, A. N.** (2020). Production of sustainable concrete utilising high-volume blast furnace slag and recycled aggregate with lime activator**, *Journal of Cleaner Production*, Elsevier (SCIE, IF-10.0),** Vol. 255, 10 May 2020, pp. 1-14. 120188. https://doi.org/10.1016/j.jclepro.2020.120188.

27. Sinha, L., Mishra, S.S., **Nayak, A.N.**, Sahu, S.K. (2020). Free vibration characteristics of laminated composite stiffened plates: Experimental and Numerical investigation, ***Composite Structures*****, Elsevier (SCI, IF-7.1),** Volume 233, 1 Feb. 2020. https://doi.org/10.1016/j.compstruct.2019.111557.

28. Patel, S. K., Satpathy, H. P., **Nayak, A. N**., Mohanty, C. R. (2020). Utilization of fly ash cenosphere for production of sustainable lightweight concrete. ***Journal of The Institution of Engineers (India): Series A*****, Springer (Scopus),** Vol. 101 (1), 2020, Jan. 2020, pp. 179-194. https://doi.org/10.1007/s40030-019-00415-6.

29. Kumari, A. Dalai, N., Swain, R. B., **Nayak, A. N.** (2020). Shear Strengthening of RC Beams using GFRP Sheets. ***International Journal of Structural Engineering*****, Inder Science (ESCI, IF-0.4),** Vol. 10 (2), Mar. 2020, pp. 174-194. https://doi.org/10.1504/IJSTRUCTE.2020.105638.

30. Majhi, R. K., **Nayak, A. N.**, Mukherjee, B. B. (2020). An overview of the properties of sustainable concrete using fly ash as replacement for cement. ***International Journal of Sustainable Materials and Structural Systems*****, Inderscience,** Vol. 4 (1), Mar. 2020, pp. 47-90. https://doi.org/10.1504/IJSMSS.2020.106418.

31. Patel, S. K., Majhi, R.K., Satpathy, H.P., **Nayak, A.N.** (2019). Durability and microstructural properties of light weight concrete manufactured with fly ash cenosphere and sintered fly ash aggregate. ***Construction and Building Materials*****, Elsevier (SCIE, IF- 8.0),** Vol. 226, 30 Nov. 2019, pp. 579-590. https://doi.org/10.1016/j.conbuildmat.2019.07.304.

32. Majhi, R. K., **Nayak, A. N.** (2019). Bond, durability and microstructural characteristics of ground granulated blast furnace slag based recycled aggregate concrete. ***Construction and Building Materials*****, Elsevier (SCIE, IF-8.0),** Vol. 212, July 2019, pp. 578-595. https://doi.org/10.1016/j.conbuildmat.2019.04.017.

33. Satpathy, H. P., Patel, S. K., **Nayak, A. N.** (2019). Development of sustainable lightweight concrete using fly ash cenosphere and sintered fly ash aggregate. ***Construction and Building Materials*****, Elsevier (SCIE, IF-8.0),** Vol. 202, Mar. 2019, pp. 636-655. https://doi.org/10.1016/j.conbuildmat.2019.01.034.

34. Majhi, R. K., **Nayak, A. N.** (2019). Properties of Concrete Incorporating Coal Fly Ash and Coal Bottom Ash. ***Journal of The Institution of Engineers (India): Series A*****, Springer (Scopus),**Vol.100(3), Mar. 2019, pp. 459–469. https://doi.org/10.1007/s40030-019-00374-y.

35. Majhi, R. K., **Nayak, A. N.,** Mukharjee, B. B. (2018). Development of sustainable concrete using recycled coarse aggregate and ground granulated blast furnace slag. ***Construction and Building Materials*****, Elsevier (SCIE, IF-8.0),** Vol. 159, Jan. 2018, pp. 417-430. https://doi.org/10.1016/j.conbuildmat.2017.10.118.

36. **Nayak, A. N**., Kumari, A., Swain, R. B. (2018). Strengthening of RC beams using externally bonded fibre reinforced polymer composites. ***Structures*****, Elsevier (SCIE, IF- 4.3),** Vol. 14, June 2018, pp. 137-152. https://doi.org/10.1016/j.istruc.2018.03.004.

37. **Nayak, A.N.,** Satpathy, L., Tripathy, P. K. (2018). Free vibration Characteristics of Stiffened plates. ***International Journal of Advanced Structural Engineering*****, Springer (Scopus),** Vol. 10 (2), June 2018, pp 153–167. https://doi.org/10.1007/s40091-018-0189-x.

38. Kumari, A., Patel, S. S., **Nayak, A. N.** (2018). Shear strengthening of RC deep beam using externally bonded GFRP fabrics. ***Journal of The Institution of Engineers (India): Series A*****, Springer (Scopus),** Vol. 99(2), Feb. 2018, pp. 341–350. https://doi.org/10.1007/s40030-018-0272-0

39. Swain, R. B., **Nayak, A. N.** (2015). Flexural Analysis of RC Beams Strengthened with Externally Bonded FRP Sheets. ***International Advanced Research Journal in Science, Engineering and Technology*****,** Vol. 2, Issue 4, Apr. 2015, pp. 61-67 http://10.17148/IARJSET.2015.2415

40. **Nayak, A. N.,** Prajapati, G. N., Swain, R. B. and Swetapadma, S. (2015). Strengthening of square RC columns using externally Bonded FRP Sheets. **International Journal of Structural Analysis & Design,** Vol. 2 (1), Jan. 2015, pp.15 – 19.

41. Nayak, A. N., Bandyopadhyay, J. N. (2006). Dynamic response analysis of stiffened conoidal shells. ***Journal of Sound and Vibration*****, Elsevier (SCI, IF- 4.9),** Vol. 291, No. 3-5, Apr. 2006, pp. 1288-1297. http://journals.theired.org/journals/paper/details/5618.html

42. **Nayak, A. N**., Bandyopadhyay, J. N. (2005). Free vibration analysis of laminated stiffened shells, ***Journal of Engineering Mechanics*****, ASCE (SCI, IF-3.2),** Vol. 131, No.1, pp.100-105. https://doi.org/10.1061/(ASCE)0733-9399(2005)131:1(100)

43. **Nayak, A. N.**, Bandyopadhyay, J. N. (2002). Free vibration analysis and design aids of stiffened conoidal shells. ***Journal of Engineering Mechanics*****, ASCE (SCI, IF-3.2),** Vol.128 (4), Apr. 2002, pp. 419-427. https://doi.org/10.1061/(ASCE)0733-9399(2002)128:4(419)

44. **Nayak, A. N**., Bandyopadhyay, J. N. (2002). On the free vibrations of stiffened shallow shells. ***Journal of Sound and Vibration*****, Elsevier (SCI, IF- 4.9),** Vol. 255 (2), Aug. 2002, pp. 357-382. https://doi.org/10.1006/jsvi.2001.4159

45. **Nayak, A. N**., Bhattacharyya, S. K. (1998). Welded T-Joints with Hollow sections. ***International Journal of Structures*** **(Scopus),** Vol. 18, No.1, pp.29-50.

46. Dubey, A. K., Nayak, A. N., Bhattacharyya, S. K. (1999). Strength of Thin-walled Steel-concrete Composite Beams: An Experimental Study. ***Journal of Institution of Engineers (India)*****, (Scopus)**, Vol. 80, pp.37-41 (K. F. Antia National Award for best paper in engineering for the session 1999-2000).

47. Nayak, A. N., Bhattacharyya, S. K. (1997). Behaviour of Joints with Rectangular and Square Hollow Steel Sections. ***Journal of Institution of Engineers (India)*** **(Scopus),** Vol. 78, pp.116-122.

- **National Journals**

48. Patel, G. and **Nayak, A. N.** (2021). Design aids for buckling load of clamped cylindrical panel under uniform loading. **Annual Technical Journal, 2021, Institution of Engineers (India) Odisha State Centre, Bhubaneswar.**

49. Tripathy, P. K. and **Nayak, A. N.** (2018). Seismic analysis and design of multi-storeyed unsymmetrical RC framed building. **Annual Technical Journal, 2018, Institution of Engineers (India) Odisha State Centre, Bhubaneswar.**

50. **Nayak, A. N.,** Tripathy, P. K. (2017). Free Vibration Analysis of Grid Slabs using FEM. **Annual Technical Journal, 2017, Institution of Engineers (India) Odisha State Centre, Bhubaneswar.**

51. Tripathy, P. K., **Nayak, A. N.** (2014). Computer aided earthquake resistant design and detailing of multi-storeyed RC framed building. **Annual Technical Journal, 2014, Institution of Engineers (India) Odisha State Centre, Bhubaneswar**.

52. Tripathy, P. K., Nayak, A. N. (2013), "Importance of building form and architectural design concepts for eliminating torsional effects due to earthquake forces**. Annual Technical Journal, 2013, Institution of Engineers (India) Odisha State Centre, Bhubaneswar.**

- **International Conferences**

53. Lenka, B. P., Chanda, S. S., Nayak, A. N. (2023). Sustainable recycled aggregate concrete using GGBFS as replacement of binder: A review on compressive strength and microstructural properties. International Conference on Pollution Control for Clean Environment (ICPCCE-2023), IIT, Bhubaneswar, December 15-16, 2023.
54. Lenka, B. P., Chanda, S. S., Nayak, A. N. (2022). Non-destructive characteristics of alkali activated recycled aggregate concrete with blast furnace slags. 3rd International Conference on Recent Developments in Sustainable Infrastructure (ICRDSI-2022), KIIT, Bhubaneswar, December 16-18, 2022.
55. Patel, G., Nayak, A.N (2022). Dynamic instability characteristics of Spherical Panels subjected to linearly varying in-plane loading. 12th Structural Engineering Convention (SEC-2022), Malaviya National Institute of Technology, Jaipur, India, December 19 - 22, 2022.
56. Dutta, B., Nayak, A.N., Nanda, B. and Dirar, S., 2022, December. Nonlinear FE Model for Shear Strengthening of Simply Supported RC Beams with FRP DE Bars, 12th Structural Engineering Convention – 2022 (SEC-2022), Malaviya National Institute of Technology (MNIT), Jaipur, Rajasthan, India, December 19-22, 2022.
57. Dutta, B., Nayak, A. N., Nanda, B., Dirar, S. (2021). Reinforced concrete deep beam shear retrofitted with deep embedded bar: A numerical investigation. International Conference on Sustainable Materials and Practices for Built Environment (SMPBE-2021), held at Manipal University, Jayepore, Rajsthan, India during 25-26, November 2021.
58. Patel, S. K., Mohanty, C. R., Nayak, A. N. (2021). Application of fly ash cenosphere in cement composites: A comprehensive review. PREPARE@ u®| IEI Conferences. https://doi.org/10.36375/prepare_u.iei.a107.
59. Kumari, A., Nayak, A.N. (2023). Nonlinear Finite Element Analysis of GFRP Fabrics Strengthened RC Deep Beams Using ABAQUS. In: Madhavan, M., Davidson, J.S.,

Shanmugam, N.E. (eds) Proceedings of the Indian Structural Steel Conference 2020, March 25-27, 2020, IIT Hyderabad, India

60. Majhi, R. K. and **Nayak, A. N.** (2019). "Development of eco-efficient and cost-effective concrete using recycled aggregate and ground blast furnace slag" 9th IconSWM-CE 2019, November 27-30, 2019, KIIT Bhubaneswar, Odisha, India.
61. Dutta, Baisali, Sogut, K., Dirar, S., **Nayak, A. N.**, Nanda, B., Theofanous, M. and Faramarzi, A. (2019). "Nonlinear Finite Element Analysis of Reinforced Concrete Beams Strengthened in Shear with Embedded Steel Bars." ***Proceedings of the 9th Biennial Conference on Advanced Composites in Construction 2019 held at the University of Birmingham, UK*** on 3rd - 5th September 2019, pp, 239-244.
62. Kumari, A., **Nayak, A. N.** (2019). "Behaviour of RC deep beams strengthened with externally bonded GFRP fabrics: An experimental study". ***International Conference on Recent Development in Sustainable Infrastructures (ICRDSI-2019),*** **Springer**, held at KIIT, Bhubaneswar, Odisha, India, during July 11-13, 2019.
63. Patel, S. K. and **Nayak, A. N.** (2019). Study on specific compressive strength of concrete with fly ash cenosphere. ***International Conference on Recent Development in Sustainable Infrastructure (ICRDSI-2019),*** Springer, ***KIIT, University, Bhubaneswar, India***, Jul. 11-13, 2019,
64. Sinha, L., **Nayak, A. N**., Sahu, S.K. Sahu (2018). Free Vibration characteristics of laminated composite stiffened plates." ***Structural Engineering Convention (SEC-2018),*** Dec. 19-21, 2018, ***Jadavpur University, Kolkata.***
65. Patel, G., **Nayak, A. N**., Sahu, S. K. (2018). "Static stability of curved panels subjected to linear varying in-plane loads," ***Structural Engineering Convention (SEC-2018),*** Dec. 19-21, 2018, ***Jadavpur University, Kolkata***
66. Sihna, L., Mishra, S. S., **Nayak, A. N.** (2018). "Experimental Study on vibration characteristics of stiffened composite plates." ***International Conference on Advances in Construction Materials and Structures (ACMS-2018),*** March 07-08, 2018**, Indian Institute of Technology, Roorkee.**
67. Kumari, A., **Nayak, A. N.** (2018). "Shear capacity of GFRP strengthened RC deep beam: An experimental study." ***International Conference on Advances in Construction Materials and Structures (ACMS-2018),*** March 07-08, 2018***, Indian Institute of Technology, Roorkee.***
68. Majhi, R. K., Jena, P. K., Sahu, A. K., Mohanty, P., **Nayak, A. N.** (2018). Effects of lime on properties of concrete containing recycled aggregate and ground granulated blast furnace slag."

International Conference on Advances in Construction Materials and Structures (ACMS-2018), March 07-08, 2018***, Indian Institute of Technology, Roorkee.***

69. Kumari, A., **Nayak, A. N.** (2018). "An experimental study on shear strengthening of RC deep beams using externally bonded GFRP sheets." ***2nd Internal Conference on Advances in Concrete, Structural and Geotechnical Engineering (ACSGE-2018),*** February 26-28, 2018, ***Birla Institute of Technology, Pilani.***
70. **Nayak, A. N.** (2018), "Vibration of Laminated Stiffened Shells." **13thInternational Conference on Vibration Problems (ICOVP-2017), Organized by IIT, Guwahati and ISIK University International, Turkey,** Nov. 29- December 02, 2017 **(Invited Talk).**
71. Swain, R. B., Kumari, A., **Nayak, A. N.** (2016). "Experimental Study on Shear Strengthening of RC Circular Column using GFRP Sheets" ***International Conference on Recent Advances in Mechanics and Materials (ICRAMM-2016)",*** December 16-17, 2016, ***VSS University of Technology, Burla, Odisha, India,*** pp. 195-200, ISBN 978-93-85909-56-6, I.K. International Publishing House Pvt. Ltd., ***New Delhi.***
72. **Nayak, A. N.**, Swain, R. B., Prajapati, G. N., Swetapadma, S. (2014), "Strengthening of square RC columns using externally bonded FRP sheets", ***International Conference on Advances in Civil, Structural and Mechanical Engineering (CSM-2014),*** November 16-17, 2014, ***University of Birmingham, UK,*** pp. 21-25, ISBN:978-1-63248-054-5, doi:10.15224/978-1-63248-054.5-44**.**
73. Swain, R. B., **Nayak, A. N.** (2010), "Strengthening of R.C. beams using externally bonded fibre reinforced polymer composites", ***Asian Conference on Ecstasy in Concrete (ACECON-2010)***, December 05-09, 2010, IIT, Madras, Chennai, ***India***.
74. Pore, A., **Nayak, A. N.**, Bandyopadhyay, J. N. (2003). "Seismic retrofit of rectangular reinforced concrete column with FRP plates." ***China-US Workshop on Protection of Urban Infrastructure and Public Buildings against Earthquakes and Manmade Disasters,*** February 21-22, 2003, Beijing, **China.**
75. **Nayak, A. N.,** Bandyopadhyay, J. N. (2003). "Vibration analysis of eccentrically stiffened laminated plates with cut-outs***." International Workshop and Conference on Construction Management and Materials (CONMAT 2003)*****,*** January 09-11, 2003, IIT, Kharagpur, **India.**
76. **Nayak, A. N.**, Bandyopadhyay, J. N. (2002). "Free vibration analysis of stiffened cylindrical shell roofs**." *International Conference on Advances in Civil Engineering (ACE 2002)*****,*** January 03-05, 2002, I. I. T., Kharagpur, **India**.

77. **Nayak, A. N.**, Bandyopadhyay, J. N. (2001) "Application of FEM on the free vibration of laminated composite conoidal shells." ***ACUN-3 International Composites Conference on Technology Convergence in Composites Applications***, February 6-9, 2001, UNSW, Sydney, **Australia.**
78. **Nayak, A. N.**, Bandyopadhyay, J. N. (2000). "Finite element free vibration analysis of doubly curved stiffened shells", ***International conference on Recent Advances in Mathematical Sciences (ICRAMS-2000)***, December 20-22, 2000, I.I.T., Kharagpur, **India.**
79. **Nayak, A. N.**, Bandyopadhyay, J. N. (2000). "Free vibration analysis of shells with curved quadratic isoparametric eight and nine node finite elements." ***Second Structural Engineering Convention (SEC-2000): An International Meet***, January 5-8, 2000, I.I.T., Bombay, **India.**

- **National Conferences**

80. Patel, G. and **Nayak, A. N.** (2021). Design aids for buckling load of clamped cylindrical panel under uniform loading. ***62nd Annual Technical Session,*** March 28, 2021, ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar.***
81. Patel, S. K., **Nayak, A. N.,** Mohanty, C. R. (2019). Hardened Properties of Concrete with fly ash cenosphere as fine aggregate. ***National Conference on Civil Engineering and Urban Planning for Sustainable Development (CUPSD-2019),*** Feb. 26-27, 2019, ***DRIEMS, Cuttack.***
82. Sinha, L., **Nayak, A. N.**, Sahu, S.K. Sahu (2019). Vibration of simply supported laminated composite plates." ***National Conference on Advances in Structural Technology (COAST-2019)***, Feb.01-03, 2019, ***NIT, Silcher.***
83. Tripathy, P. K. and **Nayak, A. N.** (2018). Seismic analysis and design of multi-storeyed unsymmetrical RC framed building. ***59th Annual Technical Session,*** January 21, 2018, ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar.***
84. Majhi, R. K., **Nayak, A. N.** (2017). "Study of effect of coal bottom ash and fly ash as replacement of sand and cement on compressive strength of concrete." ***All India Seminar on Sustainable Materials and Technology for Better Future,*** November 11-12, 2017, ***Institution of Engineers (India), Rourkela Local Centre and National Institute of Technology, Rourkela.***
85. **Nayak, A. N.,** Tripathy, P. K. (2017). Free Vibration Analysis of Grid Slabs using FEM. ***58th Annual Technical Session,*** February 19, 2017, ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar.***

86. Jena, T., Tripathy, P. K., **Nayak, A. N.** (2015). "Forced Vibration Analysis of Laminated Composite Stiffened Plates." ***2nd Indian National Conference on Advanced Mechanics (INCAM-2015),*** July 13-15, 2015, ***Indian Institute of Technology, Delhi, India, pp. 481-487, ISBN978-81-8487-509-6.***
87. **Nayak, A. N.**, Swain, R. B. (2014), "Seismic planning, design, detailing and retrofitting of multi-storeyed RC framed buildings: An overview", ***4th All India Police Housing Conference,*** September 25-26, 2014, ***Bhubaneswar, Odisha, India.***
88. Swain, R. B., Dalai, N., **Nayak, A. N.** (2014), "Shear strengthening of R.C. beams using externally bonded fibre reinforced polymer composites", ***All India seminar on Advances in Construction Technology (ACT-2014),*** February 09-10, 2014, ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar, Odisha, India.***
89. Tripathy, P. K., **Nayak, A. N.** (2014). Computer aided earthquake resistant design and detailing of multi-storeyed RC framed building. ***55th Annual Technical Session,*** March 01, 2014, ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar.***
90. Dalai, N., Swain, R. B., **Nayak, A. N.** (2013), "Shear strengthening of RC beams using externally bonded FRP: A state of art review", ***National Conference on Emerging New Materials in Engineering Applications (ENMEA-2013),*** January 19-20, 2013, ***VSSUT, Burla, Odisha, India.***
91. Tripathy, P. K., Nayak, A. N. (2013), "Importance of building form and architectural design concepts for eliminating torsional effects due to earthquake forces**.** ***54th Annual Technical Session,*** February 10, 2013, ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar.***
92. **Nayak, A. N.**, Tripathy, P. K., Sethi, S. R. (2012), "Design aids for vibration characteristics of grid slabs using finite element method", ***National Conferences on Recent Advances in Mechanics and Materials (RAMM-2012),*** February 25-26, 2012, VSSUT, Burla, Odisha, ***India.***
93. Swain, R. B., **Nayak, A. N.** (2012), "Behaviour of strengthened RC beams using externally bonded FRP composites- a state of art review", ***National Conferences on Recent Advances in Mechanics and Materials (RAMM-2012)***, February 25-26, 2012, VSSUT, Burla, Odisha, ***India.***

94. **Nayak, A. N.**, Swain, R. B. (2011), "Flexural analysis and design-aids of FRP strengthened RC beams", ***All India Seminar on Latest Advances in Concrete Technology***, July 16-17, 2011. ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar.***
95. **Nayak, A. N.**, Sethi, S. R., Tripathy, P. K., Sahoo, A. K. (2011), "Special types of concrete used in modern construction", ***All India Seminar on Latest Advances in Concrete Technology,*** July 16-17, 2011. ***Institution of Engineers (India) Odisha State Centre, Bhubaneswar.***
96. Panigrahi, S. K., **Nayak, A. N.** (2007). "An Introduction to self-compacting concrete." ***National Conference on Recent Advances in Civil Engineering (RACE-2007),*** March 01-12, 2007, College of Engineering & Technology, Bhubaneswar, ***India.***
97. **Nayak, A. N.**, Bandyopadhyay, J. N. (2003). "Natural frequencies of stiffened plates with cut-outs." ***National Seminar on Emerging Trends in Structural Mechanics and Composites (ETSMC-2003),*** November 01-02, 2003, National Institute of Technology, Rourkela, ***India***.
98. **Nayak, A. N.** (1996). "Development, Properties and Behaviour of High Strength Concrete: An Overview." ***National Seminar on High Performance Concrete***, February 2-3, 1996, ICI, Bangalore, **India.**
99. **Nayak, A. N.**, Bhattacharyya, S. K. (1994). "Behaviour of steel-concrete composite columns." ***National Seminar on Composite Materials*****,** March 18-19, 1994, I.G.I.T., Sarang, Orissa, **India.**

Books/Book Chapters Authored/Edited:

1. Advances in Mechanics and Materials, 2012, VSSUT, Burla: Book Edited.

2. Advances in Mechanics and Materials, 2016, I.K. International Publishing House Pvt. Ltd., New Delhi, ISBN: 978-93-85909-56-6: Book Edited.

3. Patel, S.K., Nayak, A.N. (2021). Study on Specific Compressive Strength of Concrete with Fly Ash Cenosphere. In: Das, B., Barbhuiya, S., Gupta, R., Saha, P. (eds) Recent Developments in Sustainable Infrastructure . Lecture Notes in Civil Engineering, vol 75. Springer, Singapore. https://doi.org/10.1007/978-981-15-4577-1_47 (Book Chapter).

4. Kumari, A., Nayak, A.N. (2021). Behaviour of RC Deep Beams Strengthened with Externally Bonded GFRP Fabrics: An Experimental Study. In: Das, B., Barbhuiya, S., Gupta, R., Saha, P. (eds) Recent Developments in Sustainable Infrastructure . Lecture Notes in Civil Engineering, vol 75. Springer (Scopus), Singapore. https://doi.org/10.1007/978-981-15-4577-1_23 (Book Chapter).

5. Nayak, A. N., Bandyopadhyay, J. N. (2022). Vibration of laminated composite stiffened shallow shells, Toughened Composites: Micro Macro Systems, pp. 261-276, Edited by S. Bandyopadhyay and R. Guuala, Taylor and Francis (Scopus), 2022: https://doi.org/10.1201/9780429330575 (Book Chapter).

6. Kumari, A., Nayak, A.N. (2023). Nonlinear Finite Element Analysis of GFRP Fabrics Strengthened RC Deep Beams Using ABAQUS. In: Madhavan, M., Davidson, J.S., Shanmugam, N.E. (eds) Proceedings of the Indian Structural Steel Conference 2020 (Vol. 2). ISSC 2020. Lecture Notes in Civil Engineering, vol 319. Springer (Scopus), Singapore. https://doi.org/10.1007/978-981-19-9394-7_2 (Book Chapter).

7. Lenka, B.P., Chanda, S.S., Nayak, A.N. (2025). Non-destructive Characteristics of Alkali-activated Recycled Aggregate Concrete with Blast Furnace Slags. In: Kurwadkar, S., Choudhary, R., Samui, P., Nanda, S. (eds) Recent Developments in Sustainable Infrastructure. ICRDSI 2023. Lecture Notes in Civil Engineering, vol 594. Springer (Scopus), Singapore. https://doi.org/10.1007/978-981-96-5043-9_14 (Book Chapter).

Research Guidance:

- **Ph. D guidance**: **12 (Completed 08 and Ongoing 04)**

1. Mrs. Baisali Dutta. Shear strengthening of RC beams using deep embedded bars: Numerical and experimental investigations. VSSUT, Burla **(Notification No. VSSUT/PGS&R/1852/2024 dated 26/11/2024).**

2. Mrs. Gayatri Patel. Static and dynamic stability analysis of isotropic and composite curved panels under linearly varying in-plane static/periodic loading. VSSUT, Burla **(Notification No. VSSUT/PGS&R/1488/2024 dated 04/09/2024).**

3. Dr. Leena Sihna (2022). Experimental and numerical vibration analysis of laminated composite stiffened plates with/without cut-out. VSSUT, Burla **(Notification No. VSSUT/PGS&R/738/2022 dated 03/08/2022)**.

4. Dr. Sudeep Kumar Patel (2022). Characterization of structural lightweight concrete utilizing high volume fly ash cenosphere and sintered fly ash aggregate, VSSUT, Burla **(Notification No. VSSUT/PGS&R/406/2022 dated 11/04/2022)**.

5. Dr. Rajib Kumar Majhi (2020). Sustainable concrete using high volume ground granulated blast furnace slag and recycled coarse aggregate. VSSUT, Burla **(Notification No. VSSUT/PGS&R/1368(21)/2020 dated 18/08/2020)**.

6. Dr. Archana Kumari (2020). Shear strengthening of RC deep beams with/without web openings using externally bonded GFRP fabrics. VSSUT, Burla **(Notification No. VSSUT/PGS&R/1568/2020 dated 15/09/2020)**.

7. Dr. Prasant Kumar Tripathy (2018). Vibration of stiffened laminated composite plates. Sambalpur University, Burla **(Notification No.5346/EC.III Dated 10/10/2018)**.

8. Dr. Rama Ballav Swain (2018). Retrofitting of concrete structures using fibre reinforced polymer composites. Sambalpur University, Burla **(Notification No.1833/EC.III Dated 17/04/2018)**.

9. Mr. Bibhu Prasad Lenka, Production of sustainable lime activated concrete with replacement of cement and fine aggregate by blast furnace slag waste and natural coarse aggregate by demolition waste. VSSUT, Burla (To be submitted shortly).

10. Mr. Biswaranjan Tripathy. Production of bacterial concrete utilizing industrial and demolition wastes. VSSUT, Burla (Ongoing from 2021).

11. Mr. Amiya Mudali. Development of sustainable pavement concrete utilizing high volume of industrial and demolition wastes. VSSUT, Burla (Ongoing from 2022).

12. Mrs. Laren Satpathy. Production of concrete using waste materials, VSSUT, Burla (Ongoing from July 2023)

- **M. Tech guidance: 30**

1. Mr. Rudra Narayan Nayak. Free vibration and buckling analysis of laminated composite plates with complicated shape of cut-outs. VSSUT, Burla (2024).
2. Ms. Subhasmita Pradhan. Durability of pavement concrete utilising demolition and industrial wastes. VSSUT, Burla (2024).
3. Mr. Pratik Kanungo. Production and analysis of rigid pavement concrete incorporating industrial and demolition wastes, VSSUT, Burla (2023).
4. Ms. Pratikshya Parida. Characterization of steel slag-based bacterial concrete, VSSUT, Burla (2023).
5. Mr. Pritish Kumar Ratha. Durability and microstructure study of bacterial concrete utilizing waste materials, VSSUT, Burla (2023).

6. Mr. Jayadev Ojha. Structural performance of RC beams shear strengthened with externally bonded GFRP sheets: Experimental and numerical investigation. VSSUT, Burla (2022).
7. Mr. Alok Kumar Panditray. Shear strengthening of cantilever RC beams strengthened with DE bars., VSSUT, Burla (2022).
8. Mr. Asim Behera. Corrosion assessment of steel slag based recycled aggregate concrete. VSSUT, Burla (2022).
9. Mr. Siba Sankar Chanda. Characterization of steel slag based recycled aggregate concrete. VSSUT, Burla (2022).
10. Mr. Bishnu Prasad Mahapatra, "Corrosion assessment of GGBFS based recycled aggregate concrete". VSSUT, Burla (2021).
11. Ms. Rajashree Rani Pradhan, "Numerical study of shear strengthening of RC beams using deep embedment FRP bars". VSSUT, Burla (2021).
12. Mr. Kausik Mohapatra, "Finite element analysis of RC beams strengthened with externally bonded FRP composites". VSSUT, Burla (2021).
13. Ms. Sasmita Jena, "Assessment of compressive strength and water absorption of sustainable concrete utilizing wastes". VSSUT, Burla (2021).
14. Ms. Amrita Patnaik, "Study of rate of hydration of cement with partial replacement of GGBFS", VSSUT, Burla (2020).
15. Ms. Snigdha Senapati, "Durability study of Sustainable Concrete Containing Steel slag and Recycled Aggregate", VSSUT, Burla (2020).
16. Mr. Abinash Padhy, "Effect of silica fume on mechanical properties Lightweight Concrete Containing Fly Ash Cenosphere and Sintered Fly Ash Aggregate", VSSUT, Burla (2020).
17. Mr. Nitish Kumar Bhoi, "Acid Resistance of Lightweight Concrete Containing Fly Ash Cenosphere", VSSUT, Burla (2019).
18. Ms. Subhralina Singh, "Mechanical Properties of Sustainable Concrete Using Steel Slag and Recycled Coarse Aggregate", VSSUT, Burla (2019).
19. Ms. Supra Swagatika Mishra, "Free Vibration Analysis of Stiffened Laminated Composite Plates: Experimental and Numerical Study", VSSUT, Burla (2018).
20. Mr. Hara Prasad Satpathy, "Development of Sustainable Lightweight Concrete Using Fly Ash Cenosphere and Sintered Fly Ash Aggregate", VSSUT, Burla (2018).
21. Mr. Swastik Pradhan, "Strengthening of Shear Deficient Deep Beams Using Externally Bonded GFRP Composites", VSSUT, Burla (2017).

22. Mr. Uma Shankar Biswal, “Development of Lightweight Concrete using Cenosphere”, VSSUT, Burla (2017).
23. Mr. Saumya Ranjan Sahoo, “Characterization of Lightweight Concrete Using Ash Cenospheres”, VSSUT, Burla (2016).
24. Mrs. Sanchita Behera, “Free Vibration Analysis of Isotropic Conoidal Shell with/without Cutouts”, VSSUT, Burla (2016).
25. Mrs. Sushree Sangita Patel, “Strengthening of RC Deep Beams using Externally Bonded GFRP”, VSSUT, Burla (2016).
26. Mrs. Trushna Jena, “Vibration Analysis of Isotropic and Laminated Composite Stiffened Plates Using Finite Element Method”, VSSUT, Burla (2014).
27. Mr. Durga Charan Sahoo, “Strengthening of Shear Deficient of RC Beams Using Externally Bonded Glass Fibre Reinforced Polymer”, VSSUT, Burla (2014).
28. Mr. Rajib Kumar Majhi, “Strengthening of RC Deep Beams Using Externally Bonded GFRP”, VSSUT, Burla (2013).
29. Mrs. Laren Satpathy, “Free Vibration Analysis of Stiffened Plates Using Finite Element Method”, VSSUT, Burla (2013).
30. Mrs. Nibedita Dalai, “Shear Strengthening of RC Beams Using Externally Bonded FRP”, VSSUT, Burla (2013).

Awards & Honours:

1. The John C Gammon National Award (**Gold medal**) for the best paper “Static stability analysis and design-aids of curved panels subjected to linearly varying in-plane loading” published in the Journal of Institution of Engineers (India): Series A, Issue 2, Volume 102, 2021.

2. Sayed Mumtaz Ali Memorial Award during 62nd Annual technical Session held on 28th March 2021 for best paper titled “Design aids for buckling load of clamped cylindrical panel under uniform loading” published in the Technical Annual Journal, 2021 of Institution of Engineers (India) Odisha State Centre, Bhubaneswar.

3. Certificate of Appreciation awarded by Elsevier Reviewer Experience Team for the peer review work of so many Elsevier Journal papers during the calendar year 2020.

4. Certificate of Appreciation awarded by Springer Nature for the peer review work of many Springer Journal papers during the calendar year 2020.

5. Award of Certificate of Appreciation during 12th Convocation by Veer Surendra Sai University of Technology, Burla, Odisha for the contribution towards Quality Journal Publications for the Year 2020.

6. Govinda Gupta Memorial Award for the outstanding contribution in the field of R&D activity for the year 2018 by Institution of Engineers (India), Odisha State Centre, Bhubaneswar on celebration of Engineers' Day on 15th September 2018.

7. Er. P. C. Chowdhury Award during 59th Annual technical Session held on 21st January 2018 for best paper "Seismic analysis and design of multi-storeyed unsymmetrical RC framed building" published in the Technical Annual Journal, 2018 of Institution of Engineers (India) Odisha State Centre, Bhubaneswar

8. Sayed Mumtaz Ali Memorial Award during 58th Annual technical Session held on 19th February 2017 for best paper "Free Vibration Analysis of Grid Slabs using FEM" published in the Technical Annual Journal, 2017 of Institution of Engineers (India) Odisha State Centre, Bhubaneswar.

9. Citation for Serving as the Member of Board of Management, VSSUT, Burla during Diamond Jubilee Celebration on 19th March 2017,

10. Institution Award during 55th Annual technical Session held on 1st March 2014 for best paper "Computer aided earthquake resistant design and detailing of multi-storeyed RC framed building" published in the Technical Annual, 2014 of Institution of Engineers (India) Odisha State Centre, Bhubaneswar.

11. Sayed Mumtaz Ali Memorial Award during 54th Annual technical Session held on 10th February 2013 for best paper "Importance of building form and architectural design concepts for eliminating torsional effects due to earthquake forces" published in the Technical Annual, 2013 of Institution of Engineers (India) Odisha State Centre, Bhubaneswar.

12. K. F. Antia National Award (**Gold medal**) for the best paper "Strength of Thin-walled Steel-concrete Composite Beams: An Experimental Study" published in the Journal of Institution of Engineers (India) among all branches of engineering for the session 1999-2000.

13. Fellowship by MHRD, Govt. of India, 1998 for Ph. D study.

14. Fellowship by MHRD, Govt. of India, 1993 for M. Tech study.

15. National Scholarship, 1980 by Govt. of Odisha for Higher studies.

16. National Rural Talent Scholarship, 1976 by Govt. of Odisha for Secondary school education.

Members of Professional Bodies:

1. Fellow, Institution of Engineers (India) (F-115674-4)
2. Life member, Indian Concrete Institute (9075)
3. Life member, Indian Association for Structural Engineers (IASE)

Reviewer of Refereed Journals: More than 150 papers

1. Scientific Reports, **Nature (SCIE, IF- 3.8) – 01** (Jan 2022).
2. Journal of Bridge Engineering, **American Society of Civil Engineers, ASCE (SCI, IF- 3.3)- 05** (Aug 2017, June 2017, Apr 2017, Jan 2017, Oct 2009).
3. Additive Manufacturing, **Elsevier (SCIE, IF-10.3)- 02** (June 2021, May 2021).
4. Journal of Cleaner Production, **Elsevier (SCIE, IF-9.8)- 10** (March 2020-July 2023).
5. Sustainable Materials and Technologies, **Elsevier (SCIE, IF- 8.7) - 02** (April 2021-May 2021)
6. Cement and Concrete Research, **Elsevier (SCIE, IF-10.9)- 2** (Jul 2023 and Sep 2023).
7. Construction and Building Materials, **Elsevier (SCIE, IF-7.4)- 16** (April 2017-June 2024).
8. Engineering Applications of Artificial Intelligence **Elsevier (SCIE, IF-7.5)- 1** (Dec 2024).
9. Journal of Building Engineering, **Elsevier (SCIE, IF-6.7)- 15** (Jan 2022-Dec 2022).
10. Composite Structures, **Elsevier (SCIE, IF-6.3) – 07** (Between June 2020-February 2023).
11. Algal Research, **Elsevier (SCIE, IF-4.6) – 01** (Dec 2019).
12. European Journal of Mechanics / A Solids, **Elsevier (SCIE, IF-4.4) - 03** (July 2019- April 2019).
13. Journal of Sound and Vibration, **Elsevier (SCIE, IF-4.3) – 04** (Sep 2006- Nov 2021).
14. Engineering Structures, **Elsevier (SCIE, IF-5.6) – 05** (Sep 2022-May 2024).
15. Structures, **Elsevier (SCIE, IF-3.9) – 13** (Dec 2020-une 2023).
16. Engineering Failure Analysis, **Elsevier (SCIE, IF-4.4) – 03** (Aug 2022-Dec 2022)
17. Materials Today: Proceedings, **Elsevier (Scopus) - 06** (Mar 2021-Feb 2022)
18. Cleaner Engineering and Technology, **Elsevier (SCIE) – 5.3** (Nov 2020, Oct 2020)
19. Achieves of Applied Mechanics, **Springer (SCIE, IF. – 2.2) -02** (Jul 2022, May 2022)
20. Journal of Vibration Engineering & Technology, **Springer (SCI, IF-2.1) - 04** (Jan 2021, Nov 2020, Sep 2019, Aug 2019).
21. KSCE Journal of Civil Engineering, **Springer (SCIE and Scopus, IF-1.9) - 04** (Nov 2021, Sep 2021, Oct 2019, Aug 2018).

22. Journal of Institution of Engineers (India)/A, **Springer (Scopus) – 01** (Jan 2017)
23. Asian Journal of Civil Engineering, **Springer (Scopus) – 01** (Jan 2022)
24. Journal of Civil Engineering and Management, **Taylor and Francis (SCIE, IF. – 4.3) -02** (Mar 2022, Jan 2022)
25. Steel and Composite Structures, **Techno-Press (SCIE, IF-4.0) - 02** (Jun 2022, Apr 2022).
26. Advances in Concrete Construction, **Techno-Press (SCIE, IF-2.0)-01** (Aug 2020).
27. Structural Concrete, **Willey (SCIE, IF-3.8) - 01** (Apr 2020).
28. International Journal of Acoustics and Vibration, **IIAV (SCIE, IF-0.96) - 02** (Sept 2021, Aug 2021)
29. Advances in Civil Engineering Materials, **ASTM Internationals (Scopus)- 02** (Sept 2019, Jan 2020).
30. World Journal of Engineering, **Emerald (Scopus) - 01**(Dec 2019).
31. The Indian Concrete Journal **(Scopus)-01** (Mar 2019).
32. Mechanics of Advanced Composite Structures, **Semnan University (Scopus) -01** (Nov 2016).

Reviewer of Research Project:

1. Science & Engineering Research Board (SERB), Dept. of Science & Technology, Govt. of India (01)

International academic Exposure

1. **Visited Sri Lanka during August 23-31, 2023.** During this visit, discussed the progress and future technical impact activities of the Indo-Sri Lanka Joint Research Project with Prof. C. S. Bandara and his team members of University of Peradeniya, delivered a talk on "Production of sustainable concrete using industrial and demolition wastes as replacement of binder and aggregates" and interacted with the faculty members doing research in this area at Faculty of Engineering, University of Peradeniya and visited Kandy Municipal Corporation Solid Waste Treatment Plant at Kandy, Sri Lanka.
2. **Visited United Kingdom during November 22-29, 2018 for** discussing the progress, future technical impact activities of the **collaborative UGC-UKIERI Project** of self and Prof. Samir Dirar, University of Birmingham and attending the Seminar on "experimental work and non-linear finite element analysis" delivered by UK team.
3. **Visited United Kingdom during November 12-20, 2014** for presenting technical paper in the International Conference on Advances in Civil, Structural and mechanical Engineering **(CSM-2014)** held at University of Birmingham, UK during November 16-17, 2014.

4. **Visited Australia during February 04-11, 2001** for presenting technical paper in International Conference **ACUN-2001** held at UNSW, Sydney during Feb. 5-9, 2001.

Sponsored Project & Consultancy:

- **Research Projects Completed and/or Running:**
  1. **Indo-Sri Lanka Joint Research Project** of 3years duration (2021-2024) on "Sustainable construction practice through preparation of pre-cat concrete blocks using construction-demolition and plastic waste" for amount of INR 28,19,703 and LKR 61,41,000 in collaboration of Veer Surendra Sai University of Technology, Burla, India (Dr. S. K. Panigrahi, Prof. A. N. Nayak and Prof. S. K. Patro) and University of Peradeniya, Sri Lanka (Prof. P. B. R. Dissanayake and Dr. C. Bandara): **In Progress**
  2. **UK-India Collaborative Research Project (UGC-UKIERI)** of 3 years' duration (2018-2021) on "FRP shear strengthening of damaged concrete beams subjected to fatigue loading" for an amount of GBP 50,000 (₹12,18,500 + GBP 35,500) **in collaboration of University Birmingham** (**UK Lead Partner Prof. S. Dirar**) and **VSS University of Technology, Burla** (**Prof. A. N. Nayak**). **In Progress**
  3. **SERB/DST Research Project** of ₹13,25,000 of 3 years' duration (2015-2018) on Characterization of Light weight concrete using ash cenosphere: **Completed.**
  4. **AICTEMODROB Project** of ₹19,00,000 of 2 years duration (2017-19) on Development of advanced concrete lab for development of sustainable concrete incorporating recycled coarse aggregates and ground granulated blast furnace slag: **Completed.**
- **Major Consultancy Projects completed:**

  More than 60 major consultancy projects were undertaken from various Government, Private and Public Sector Organizations including NRIDA, Govt. of India, MCL, NTPC, NALCO, OPGC, OHPC, OSHB, Hirakud Dam, Vedant, Aditya Aluminum, Hindalco, and Bhusan for a total consultancy fee of more than Rs. 5.0 Crores. The notable consultancy projects are mentioned below:

  1. Non-Destructive Test and Stability Check of Residential Building at Bank's Staff Quarters Vidyut Marg, Bhubaneswar, 2024 (Consultancy Charges: Rs. 6.11 Lakhs).
  2. Geotechnical Investigation along with Design and Drawing of the Proposed High-Level Bridge Over Basundhara River required for the upcoming road from Dudka to Laikera Sliding at Basundhara Area of MCL, 2023 (Consultancy Charges: Rs. 21.24 Lakhs).

3. Geotechnical Investigation along with Design and Drawing of the 02 nos. of High-Level Bridges over Lilari nallah near central Workshop, IBVA and near Kali Mandir at LKP OCP of Lakhanpur Area of MCL, 2023 (Consultancy Charges: Rs. 35.40 Lakhs).
4. Non-destructive test of Bank's Properties at Staff Quarters, Vidyut Marg (SQVM), RBI, Bhubaneswar, 2023 (Consultancy Charges: Rs1.13 Lakhs).
5. Scrutiny of DPRs of PMGSY Roads and Bridges of Odisha State from2007-2021, NRIDA, Govt. of India (Consultancy Charges: Rs. 86.93 Lakhs).
6. Scrutiny of DPRs of PMGSY Roads and Bridges of Chhattisgarh State from 2019-2021, NRIDA, Govt. of India (Consultancy Charges: Rs. 7.80 Lakhs).
7. Testing of Concrete Materials and Mix Designs from 2007 to 2022 from various Govt., PSUs and Private Organizations (Consultancy Charges: Rs. 206.41 Lakhs).
8. Vetting of structural drawing of Institute Buildings, Silicon Institute of Technology, Bhubaneswar, 2022 (Consultancy Charges: Rs. 11.37 Lakhs).
9. Vetting of Structural drawings for Vending Zone shoe store in the Project of Maa Samaleswari Temple area under SAMALEI Plan, URC construction Pvt. Ltd., 2022 (Consultancy Charges: Rs. 10.62 Lakhs).
10. Non-destructive Tests of Bank's Residential Building at Baramunda, Reserve Bank of India, Bhubaneswar, 2022 (Consultancy Charges: Rs. 5.71 Lakhs).
11. Residual strength assessment of existing Nishigandha Club brunt under fire, Mahanadi Coalfield Ltd (MCL), Burla, 2022 (Consultancy Charges: Rs. 1.18 Lakhs).
12. Non-destructive tests of concrete in GTC stack of Aditya Aluminium, Aditya Aluminium Ltd, Lapanga, 2022 (Consultancy Charges: Rs. 3.30 Lakhs).
13. Third Party Quality Assessment (TPQA) on Construction of 348 nos. (320 nos. Type II, 16 nos. Type III, 8 nos. Type IV and 4 nos. Type V) family quarters GC, CRPF, Sambalpur, Odisha, CPWD, Sambalpur, 2022 (Consultancy Charges: Rs. 11.25 Lakhs).
14. Non-destructive tests of concrete in GTC stack of Aditya Aluminium, Aditya Aluminium Ltd, Lapanga, 2021 (Consultancy Charges: Rs. 3.30 Lakhs).
15. Conducting Ultrasonic Pulse velocity test and rebound hammer test to evaluate the concrete quality for GTC stack, Hindalco Industries Limited, Lapanga, Sambalpur, 2020 (Consultancy Charges: Rs. 3.30 Lakhs).
16. Examine fire resistance capacity of exiting lifts of Bank's main office premises, RBI, Bhubaneswar, 2020 (Consultancy Charges: Rs. 0.47 Lakhs).
17. Vetting of structural design for Community cum SHG activity center, Kalyan Mandap, Town Hall cum Auditorium, office building for Barpalli NAC Bargarh, SPIRE Consultants, Baramunda, Bhubaneswar, Odisha, 2021 (Consultancy Charges: Rs. 1.29 Lakhs).
18. Proof Checking of 14 nos. Type-V Quarters (G+6) at AIIMS, Bhubaneswar, Jai Sai Associate, Chandrashekharpur, Bhubaneswar, Odisha, 2020 (Consultancy Charges: Rs. 0.42 Lakhs).

19. Vetting of Structural Plan and Design of the Work Construction of Two Blocks of HIG (S+12 story), 12 Blocks of MIG (S+2 story) and Two blocks of 2BHK LIG (S+10 story) at Ransinghpur, Odisha State Housing Board, Bhubaneswar, 2020 (Consultancy Charges: Rs. 14.05 Lakhs).

20. Vetting of Structural Design and Drawing of Propose Residential Building at Angul, Odisha State Housing Board, Bhubaneswar, 2020 (Consultancy Charges: Rs. 5.10 Lakhs).

21. Condition Assessment and Checking of Adequacy of RCC columns and Beams of Ash Storage Silo Captive Power Plant, Hindalco Industries Limited (Consultancy Charges: Rs. 7.25 Lakhs).

22. Non-destructive Test to evaluate concrete quality of Chimney at GTC, Aditya Aluminium, Lapanga, 2019 (Consultancy Charges: Rs. 3.30 Lakhs).

23. NDT Testing of Railway Bridges under Road at Titilagarh Railway Station Yard, East Coast Railway, Titilagarh, 2019 (Consultancy Charges: Rs. 1.12 Lakhs).

24. Vetting of Construction of 28 E-Type Quarters (One Block) at District Headquarters, Sambalpur, Odisha Police Housing Welfare Corporation, Sambalpur, 2019,

25. Inspection of cracks in ash silo structure, HINDALCO, Hirakud, 2019, (Rs.7.20 Lacs)

26. NDT testing and submission of report on the observation of Deck Slab of ID Fan Foundation 4 in GTC 1of Smelter Plan Aditya Aluminimum, Aditya Aluminimum, Lapanga (Rs. 2.65 Lacs).

27. Construction for IT incubation center in the infocity IT/ITES Chandaka Bhubaneswar-Verfication of Structural Stability, Design Data & Drawing, B.C. Bhuyan Cons P Limited, 2019 (Rs. 7.08 Lacs).

28. Testing of Concrete Materials and Mix Designs for 2007-18, Govt., PSUs and Private Organizations (Rs.61.11 Lacs).

29. Non-Destructive Test of Ban's Office/Residential Buildings (2018), Reserve Bank of India, Bhubaneswar, 2018 (Consultancy charges: Rs. 10.50 Lakhs).

30. Non-destructive Test of Partially Constructed ESR at MLA Para towards checking its structural stability, PHD Sub-Division, Subarnpur, 2018 (Consultancy Charges: Rs. 3.99 Lakhs).

31. Stress Analysis of D&D slab due to enlargement of existing openings in Hirakud Hydro Electric Project, Voith Hydro Pvt. Ltd, Hirakud, 2017(Consultancy Charges: Rs. 1.00 Lakhs).

32. Safety Consultant for Construction of High Level Bridge over River Mahanadi on Athamallick, Dhalpur Road, Ranjit Buildcon Ltd, Ahmedbad, 2017 (Consultancy Charges: Rs. 9.60 Lakhs).

33. Third party quality Assurance consultancy service for project construction of KV No-2 at Sambalpur, B. B. J. Construction, Kolkata, 2017 (Consultancy Charges: Rs. 13.28 Lakhs).

34. Ultrasonic Testing of Discharge Ring, Hirakud Hydro Electric Project, Voith Hydro Pvt. Ltd, Hirakud, 2017 (Consultancy Charges: Rs. 0.90 Lakhs).

35. NDT Test for M30 Grade Concrete of Under Ground Water Tanks, PHD, Division, Jharsuguda, 2017 (Consultancy Charges: Rs. 1.50 Lakhs).

36. Vetting of Structural Drawing and Design of Work Construction of Two Blocks of G+4 EWS, Odisha State Housing Board, Bhubaneswar, 2017 (Consultancy Charges: Rs. 5.10 Lakhs).

37. Vetting of Structural Drawing and Design of High Rise Buildings, Odisha State Housing Board (OSHB), Bhubaneswar, 2016 (Consultancy Charges: Rs. 7.34 Lakhs).

38. Vetting of Structural Drawing for Construction of 12 nos. of D type Quarters in Blocks 3 storied at CHEP, Chiplima, 2016 (Consultancy Charges: Rs. 0.50 Lakhs).

39. Consultant in Non-destructive Test for Grouted columns of Bank's Office Building of Reserve Bank of India, Bhubaneswar, 2016 (Consultancy Charges: Rs. 0.47 Lakhs).

40. Checking of Foundation Design of 150 seated Ladies Hostel of Sambalpur University, MCL, Burla, 2015 (Consultancy Charges: Rs. 0.15 Lakhs).

41. Checking of Structural Design of STP to be constructed at District Headquarters Hospital, Sambalpur, PHD Division, Sambalpur, 2015(Consultancy Charges: Rs. 0.50 Lakhs).

42. Principal Consultant, NDT for concrete of Silo foundation, Aditya Aluminium, Lapanga, 2015 (Consultancy charges: Rs. 6.90 Lakhs).

43. Coordinator, STA, VSSUT, Burla under Pradhan Mantri Grama Sadak Yojana, National Rural Development Agency (NRRDA), Ministry of Rural Development, Govt of India for scrutinizing DPRs of PMGSY Roads and Bridges (Consultancy Charges: Rs. 11.24 Lakhs for the session 2012 & 2013).

44. Principal Consultant in material testing of concrete and mix design in the concrete laboratory (Consultancy Charges: Rs. 5.17 Lakhs for the session 2013& 2014).

45. Consultant in Non-destructive Test of Bank's Office Building and Residential Buildings of Reserve Bank of India, Bhubaneswar, 2014 (Consultancy Charges: Rs. 4.40 Lakhs).

46. Checking of Structural Design and Drawing of B. R. Ambedkar Medical College & Hospital, Raipur 2013 (Consultancy Charges: Rs. 0.50 Lakhs).

47. Consultant in checking the feasibility of Construction of 1st Floor on existing DAV School Building at Lakhanpur area of MCL 2013 (Consultancy Charges: Rs. 0.40 Lakhs).

48. Principal Consultant, Proof Checking of structural Design & Drawing and Conducting NDT and Issue of Structural Stability Certificate of Part C Building of CIPET, Bhubaneswar 2011 (Consultancy Charges: Rs. 0.80 Lakhs).

49. Principal Consultant, Checking the Design of Elevator of Rairakhol Railway Station of Sambalpur Division of East Coast Railway 2011(Consultancy Charges: Rs. 0.30 Lakhs).

50. Principal Consultant, Checking the Structural Drawing and Adequacy of Self Supporting Towers and Guyed Masts of Mahanadi Coalfield Limited, Burla 2011 (Consultancy charges Rs.1.2 Lakhs).

51. Principal Consultant, Design of Kalyan Mandap of N. A. C. Burla 2010 (Consultancy charges Rs.1.5 Lakhs).

52. Principal Consultant, Survey of Water Surface Area of Power Channel of Hirakud Dam, Burla, 2010 (Consultancy charges Rs.1.5 Lakhs).

53. Principal Consultant, Redesigning of Main and other Residential Buildings of Reserve Bank of India, Bhubaneswar and checking adequacy against Earthquake Forces as per New Revised IS Codes, 2009 (Consultancy charges Rs.8.5 Lakhs).

54. Principal Consultant, Stability Check of Office Building of IB Thermal Power Station, Banaharpali, 2009 (Consultancy charges Rs.0.3 Lakhs).

55. Principal Consultant, Study of Cracks Developed in Residential/Non-residential Buildings of CGM Complex of IB Valley Area of MCL 2008 (Consultancy Charges: Rs. 0.50 Lakhs).

56. Principal Consultant, Preparation of Detailed Project Reports (DPRs) on "Water Supply to Uncovered Area of Sambalpur Town" and "Improvement of Sanitation System of Sambalpur Town" under Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) for Sambalpur Municipal Council, 2006-07 (Consultancy charges Rs.20.0 Lakhs; Co-consultants: Dr. P.C. Swain, Dr. P. K. Das and Dr. P. K. Pradhan).

57. Principal Consultant, Planning of Road on Periphery of UCE Golden Jubilee Gate, 2007 (Consultancy Charges: Free of Cost).

58. Principal Consultant, In charge Construction and Supervision of UCE Golden Jubilee Gate, 2006-07 (Consultancy Charges: Free of Cost).

59. Principal Consultant, Planning of 100 seated Ladies' Hostel of UCE, Burla to be funded by MCL, 2006 (Consultancy Charges: Free of Cost).

60. Principal Consultant, In charge Construction and Supervision of E-Learning Centre of UCE, Burla, 2006-07 (In Progress; Consultancy Charges: Free of Cost; Co-consultants: Er. R. R. Bohidar, EE, R&B and Er. D. Patnaik, EE, NH).

61. Principal Consultant, Contour survey and Grid Line Establishment Work for 2nd Phase Expansion of CPP, NALCO, 2005 (Consultancy Charges: 1.2 Lakhs; Co-consultants: Dr. S. K. Chand & Dr. M. K. Dash).

62. Principal Consultant, Planning and Design for all residential and industrial structures of Talcher Thermal Power Station, NTPC, Talcher built during Sept. 2002 to Sept. 2004 (Consultancy Charges:3.75 Lakhs; Co-consultant: Dr. B. C. Panda).

63. Rehabilitation of Overhead Coal Handling Plant at Anant Colliery, MCL, Talcher, 2002 (Consultancy charges: 0.25 Lakhs).

64. Design of Market Complex of TAMRIT at Angul, 1990 (Consultancy charges: 0.20 Lakhs)

Seminar/Symposia/Short Term Course organised:

1. Coordinator, TEQIP Sponsored One Week Online Faculty Development Programme on "Emerging Trends in Civil Engineering (ETCE-2020) held during 14th -18th September 2020 at Department of Civil Engineering, VSSUT, Burla.

2. Coordinator, "UGC-UKIERI Sponsored One Day Workshop Recent Advances in Strengthening of Concrete Structures (RASCS-2019)" organized by Department of Civil Engineering, VSSUT, Burla on 9th March 2019
3. Chairman, "Industry Institute Interaction Workshop" organized by Veer SurendraSai University of Technology, Odisha" 23rd April 2016 and sponsored by Technical Education Quality Improvement Programme, MHRD, Govt. of India.
4. Chairman, "International Conference on Recent Advances in Mechanics & Materials (ICRAMM-2016)" organized by Department of Civil Engineering, VSSUT, Burla during December 17-18, 2016.
5. Course Coordinator, "Staff Development Programme on Design of Steel Structures using IS: 800-2007 (General Construction in Steel -Code of Practice) Third Revision" organized by Department of Civil Engineering, VSSUT, Burla during June 18-July 01, 2012 and sponsored by AICTE, New Delhi
6. Organizing Secretary & Convenor, "National Conferences on Recent Advances in Mechanics and Materials (RAMM-2012)" organized by Department of Civil Engineering, VSSUT, Burla during February 25-26, 2012.
7. Course Coordinator, "Training Programme for Practicing Engineers on Earthquake Resistant Design and Construction Practices" organized by Department of Civil Engineering, VSSUT, Burla during January 04-12, 2011 and sponsored by Ministry of Home Affairs, Govt. Of India.
8. Coordinator, Workshop for Curriculum Development of B. Tech. Programme in Civil Engineering of Biju Patnaik University of Technology, Orissa held at Bhubaneswar during August 25-26, 2006.
9. Coordinator, Technical Committee, 1st State Level ISTE Students Convention, Orissa Section on "Convergence of Talent and Excellence" organized by I.G.I.T., Sarang during March 20-21, 2005.

Invited Talks:

1. Delivered Key Note lecture on "Retrofitting of Concrete Structures" during National Seminar on Advances in Concrete Technology (ACT-2025)" organized by Department of Civil Engineering, C. V, Raman Global University, Bhubaneswar and Ultratech Cement Ltd on 13th September 2025.

2. Delivered Invited Online Expert lecture on "Production of sustainable concrete utilizing high volume blast furnace slag and demolition wastes" during Online Faculty Development Programme on "Latest Advances in Concrete Technology and Construction Management" organized by Civil Engineering Department of College Engineering & Technology, Bhubaneswar during Sept. 01-05, 2020.
3. Delivered Invited Online Expert lecture on "Retrofitting of structures using conventional and advanced materials" during TEQIP-III BPUT, Odisha (ATU) Sponsored Online Faculty Development Programme on "Recent Technology Trends in Construction and Civil Engineering (RTTCCE-2020) organized by Department of Civil Engineering, CAPGS, BPUT, Rourkela on 31/08/2020.
4. Delivered Expert lecture on "Retrofitting of Concrete Structures" during Recent Advances in Strengthening of Concrete Structures (RASCS-2019)" organized by Department of Civil Engineering, VSSUT, Burla on 9th March 2019.
5. Delivered Expert Lecture on "Research and Development in Concrete using Waste Materials: A state of Art" during one-week Faculty Development Programme on Advances in Engineering Materials Towards a Sustainable Construction organized at College of Engineering, Bhubaneswar during February 12-17, 2018 under the sponsorship of TEQIP-III.
6. Delivered Expert Lecture on "Types of Footings, Column-Beam Joints and Corner Reinforcement" during Bi-annual Training Programme on Quality Control and Quality Monitoring of Roads, Bridges and Buildings for non PMGSY work organized by Rural Development Department, Govt. of Odisha at Balangir on 28th February, 2018.
7. Delivered Expert Lecture on "Use of Plasticizer and Water Proofing Agent, Quality of Cement and Steel to be used in different Constructions" during Bi-annual Training Programme on Quality Control and Quality Monitoring of Roads, Bridges and Buildings for non PMGSY work organized by Rural Development Department, Govt. of Odisha at Balangir on 28th February, 2018.
8. Delivered Invited Talk on "Vibration of Laminated Stiffened Shells" during 13thInternational Conference on Vibration Problems (ICOVP-2017), Organized by IIT, Guwahati and ISIK University International, Turkey, Nov. 29- December 02, 2017.
9. Delivered Expert Lecture on "Retrofitting of Structures" during QIP short term course on "Advanced Materials and Techniques for Reinforced Concrete Structures (AMTRCS) on March 28, 2017 held at Veer Surendra Sai University of Technology, Burla, Odisha.

10. Delivered Expert Lecture on "Seismic Planning, Design, Detailing and Retrofitting of Multi-storeyed Buildings: An Overview" during QIP short term course on "Advanced Materials and Techniques for Reinforced Concrete Structures (AMTRCS) on March 27, 2017 held at Veer Surendra Sai University of Technology, Burla, Odisha.
11. Attended the one-day Workshop on Quality of Higher and Technical Education in India-Role of Universities as Resource Person held on 20th February 2017.
12. Delivered Invited talk on "Seismic planning, design, detailing and retrofitting of multi-storeyed RC framed buildings: An overview", at 4th All India Police Housing Conference, Bhubaneswar during September 25-26, 2014.
13. Delivered Invited talk on "Retrofitting of Concrete Structures using Advanced Composite materials" at Ronald Institute of Technology, Berhampur on 5th September 2014.
14. Delivered lecture on "Fibre Reinforced Polymer Composite Material: The Material of the time for retrofitting of the concrete structures" in the National Students Seminar at IGIT, Sarang on 10th April 2011.
15. Delivered lectures on "Damage Assessment of Structures subjected to Earthquake and their Renovation/Retrofitting with Conventional and Advanced Methods" at I. G. I. T., Sarang in the Training Programme for Field Engineers under National Programme for Capacity Building of Engineers in Earthquake Risk Management (NCPBEERM) sponsored by Ministry of Home Affairs, Govt. of India on 11th September 2009.
16. Delivered lecture on "Earthquake Resistance Construction Technology" in the Training on Capacity Building/Disaster Resistance Construction Technology at Sambalpur organised by Sambalpur Municipal Council, Sambalpur and Orissa State Disaster Mitigation Agency, Bhubaneswar on 4th May 2009.
17. Delivered Institute seminar talk on "Retrofitting of Structures using FRP" at N. I. T., Rourkela on 2nd April 2009.
18. Delivered lecture on "Structural vulnerability and Retrofitting of Structures" at C. E. T., Bhubaneswar in the Training Programme for Field Engineers under National Programme for Capacity Building of Engineers in Earthquake Risk Management (NCPBEERM) sponsored by Ministry of Home Affairs, Govt. of India on 9th and 10th May 2007.

Address for Communication:

- **Present Address**

  Flat No. G-203, DE-HABITAT Appartment,

  Shree Vihar, Patia Road, Kanan Vihar

Chandrasekharpur, Bhubaneswar, Odisha
PIN – 751024

- **Permanent Address**

  At/P.O-Binayakpur,
  Via-Basudevpur,
  Dist.-Bhadrak, Odisha
  PIN - 756125

Declaration:

I hereby declare that the information furnished herewith are correct to best of my knowledge.

Date: 16/09/2025 (Amar Nath Nayak)