

A Name and full address

Dr.Meena Murmu
Assistant Professor
Civil Engineering Department
NIT Raipur, Chhattisgarh.
India-492010

B Designation

Assistant Professor
Grade -II

C Institution

National Institute of Technology Raipur

D Academic Qualification

	Degree	Subject	University/Institution	Division
1.	BE	Civil Engineering	IGIT Sarang Utkal University	First Division
2.	M.Tech	Structural Engineering	NIT Rourkela	First Division
3.	PhD	Civil Engineering	NIT Rourkela	

E Work experience

	Position Held	Name of the Institute	Period	Scale of Pay
i)	Lectureship	Civil Engineering Dept. Seemanta Engineering College	July 2009 to December 2009	15000 p.m.
ii)	Assistant Professor	Civil Engineering Dept. National Institute Technology	Joined on 13th May 2013	6000AGP

Award/Prize/Certificate etc. won by the applicant.

Recipient of UPR PATNAYAK MEMORIAL AWARD for Low cost binder using Industrial By –Product foe economical Housing, during the 55th Annual Technical Session held on 1st March, 2014.

Recipient of Best paper Award In Second International conference on Advances in Engineering and Technology(ICAET – 2012)

Publications:

Award/Prize/Certificate etc. won by the applicant. Recipient of UPR PATNAYAK MEMORIAL AWARD for Low cost binder using Industrial By –Product for economical Housing, during the 55th Annual Technical Session held on 1st March, 2014.

Recipient of Best paper Award In Second International conference on Advances in Engineering and Technology(ICAET – 2012)

International Journal:

1. VN Kanthe, SV Deo, M Murmu (2023) Microstructural study of blended concrete containing multiple admixtures, *Journal of Building Pathology and Rehabilitation* 8 (2), (2023).
2. N. Mohanta and M. Murmu (2022) Alternative coarse aggregate for sustainable and ecofriendly concrete – A review, *Journal of Building Engineering*, 59,105059.
3. K Vijay, M Murmu, (2022) Evaluating durability parameters of concrete containing bacteria and basalt fiber *Journal of Building Pathology and Rehabilitation* 7 (1), 1-6.
4. K Vijay, M Murmu(2022)Application of artificial neural networks for prediction of microbial concrete compressive strength,*Journal of Building Pathology and Rehabilitation* 7 (1), 1-12
5. S Banchhor, M Murmu, SV Deo , (2022) Combined effect of fly-ash and GGBS on performance of alkali activated concrete,*Journal of Building Pathology and Rehabilitation* 7 (1), 1-6.
6. VN Kanthe, SV Deo, M Murmu, (2022)Modulus of elasticity of blended concrete containing multiple admixtures for sustainability infrastructural material, *Innovative Infrastructure Solutions* 7 (1), 1-10
7. K. Venkateswarlu, S. V. Deo, M. Murmu, Effect of Super Absorbent Polymer on Workability, Strength and Durability of Self Consolidating Concrete, *IJE TRANSACTIONS B: Applications* Vol. 34, No. 05, (May 2021) 1118-1123
8. VN Kanthe, SV Deo, M Murmu, Early Age Shrinkage Behavior of Triple Blend Concrete, *International Journal of Engineering* 33 (8), 1459-1464
9. K. Vijay and M. Murmu, “Self - repairing of concrete cracks by using bacteria and basalt fiber,” *SN Appl. Sci.*, vol. 1, pp. 1–10, 2019. (ESCI)
10. K. Vijay and M. Murmu, “Effect of calcium lactate and *Bacillus subtilis* bacteria on properties of concrete and self-healing of cracks,” *Int. J. Struct. Eng.*, vol. 10, no. 3, pp. 20–22, 2020.
11. Kanthe, V., Deo S. V. and Murmu, M. (2018) “Effect of fly ash and rice husk ash on strength and durability of binary and ternary blend cement mortar ” *Asian Journal of Civil Engineering Building and Housing* ISSN 1563-0854 Volume 19 Number 8 *Asian J Civ Eng* (2018) 19:963-970
12. Kanthe, V., Deo S. V. and Murmu, M. (2018), “Combined use of fly ash and rice husk ash in concrete to improve its properties,” *International Journal of Engineering*.

13. Kunamineni, V, Murmu, M. (2018), “Effect of calcium lactate on compressive strength and self- healing of cracks in microbial concrete”, *Frontieries of civil and structural engineering* .
14. Kunamineni, V, Murmu, M. and Deo, S. V. (2017), “Bacteria based self healing concrete – A review” *Construction and Building materials (SCI Indexed)*, 152, 1008–1014.
15. SP Singh, M Murmu ,Effects of curing temperature on strength of lime-activated slag cement *International Journal of Civil Engineering* 15 (4), 575-584
16. M. Murmu and S.P. Singh, Strength Characteristics of Lime Activated Slag Cement, *Advances in Cement Research*, 2015,27(1), 268-77.
17. M. Murmu and S.P. Singh, Influence of mineral admixtures on strength and hydration products of lime-activated slag cement, *Advances in Cement Research*, 2014, 26(1), 1–10.
18. M. Murmu and S.P. Singh, Hydration Products, Morphology and Microstructure of Activated Slag Cement, *International Journal of Concrete Structures and Materials*, 2014, 8(1) , 61-68.

National Journal: •

1. Govardhan, Deepanshu Mandhata, Meena Murmu, Mohit Sharma, Development of a Program for the Design of Steel Structure in Visual Basic, *Journal of Structural Engineering and Management*, 2014,1(2),11-16.

International Conference

1. M Murmu, NR Mohanta, N Bapure, Study on the fresh and hardened properties of concrete with steel slag as partial replacement for natural aggregates, *Materials Today: Proceedings*, 2023.
2. S Uzairuddin, M Murmu, Risk Modelling and Supporting Techniques for Deep Excavations in Metropolitan Locations, *Proceedings of the 2nd Indian International Conference on Industrial Engineering and Operations Management Warangal, Telangana, India, August 16-18, 2022.*
3. S Shukla, M Murmu, SV Deo ,Study on Fracture Parameters of Basalt Fiber Reinforced Concrete Beam by Using Finite Element Method *Recent Developments in Sustainable Infrastructure (ICRDSI-2020)—Structure.*
4. K. Venkateswarlu, S. V. Deo, M. Murmu, Overview of effects of internal curing agents on low water to binder concretes, *Materials Today: Proceedings* 32, 752-759
5. K.Vijay and M. Murmu, “Experimental Study on Bacterial Concrete using Bacillus Subtilis Microorganism” *International Conference on Emerging Trends in Civil Engineering*. Dec-2019, (Springer Lecture Notes)
6. K.Vijay and M. Murmu, “An Experimental Study on Strength Characteristics of Bacterial Concrete” *National Conference on Emerging Materials and Nanotechnology*. Held on September 6- 7th 2019, in department of Metallurgical and Material Engineering, NIT Raipur
7. K.Vijay, Meena Murmu, “Comparative study on effect of basalt and glass fiber on workability and compressive strength of microbial concrete” *International conference on civil and structural engineering*.,pp 52-56, 2017.
8. Sonal, B, Murmu, M. and Deo, S. V. “A Detailed Review on Alkali-Activated Slag (AAS) and Fly Ash Based Concrete” *International conference on civil and structural engineering*., pp 22-28, 2017.

9. Kanthe, V., Deo S. V. and Murmu, M. “ (2018), Review on the use of Industrial and Agricultural by-product for making Sustainable Concrete”, Proceedings of ASCE India conference, 12-14 December 2017 .
10. M. Murmu, M.K. Verma. (2017), “Effect of WMD and BLA as mineral Admixture on workability and strength of concrete”, International Conference on Energy, Environment and Economics, (ICEEE 2017) Edinburgh, 11th to 13th December, 2017, pp-76-82.
11. M.Murmu, Govardhan Bhat and S.Eswary “Partial Replacement of GGBS in Concrete for Prevention of Natural Resources”, ICCESE 2015 : International Conference on Civil, Environmental and Structural Engineering to be held in Kuala Lumpur, Malaysia during February, 12-13, 2015.
12. E. Satya Eswari, J. Sekharbabu, Meena Murmu, Govardhan Bhat , “Modeling and Optimizing of sinker electric discharge machine process parameters on AISI 4140 alloy steel by Central Composite Rotatable Design Method”, ICCESE 2015 : International Conference on Civil, Environmental and Structural Engineering to be held in Kuala Lumpur, Malaysia during February, 12-13, 2015.
13. Meena Murmu, Govardhan Bhat, Narendra Singh Chouhan, Ramakant Patel and Ganesh Kumar (2014), “Effect on Strength and Hydration products of Concrete using Mineral Admixtures”, International Conference on Sustainable Civil Infrastructure (ICSCI 2014), 17-18th October 2014, IIT Hyderabad, India.

National Conference

- 1.K. Vijay, M. Murmu, “An Experimental Study on Strength Characteristics of Bacterial Concrete” National Conference on Emerging Materials and Nanotechnology. Held on September 6- 7th 2019. Department of Metallurgical and Material Engineering, NIT Raipur.
2. Amra Kasaiah, Meena Murmu, Govardhan Bhatt, “A Review On Utilization of Pond Ash In Concrete”, National Conference on Emerging Materials and Nanotechnology. Held on September 6- 7th 2019. Department of Metallurgical and Material Engineering, NIT Raipur.
3. Kuruva Venkateswarlu, S.V.Deo, Meena Murmu, Internal curing of concrete using Nano materials: A Review, National Conference on Emerging Materials and Nanotechnology. Held on September 6- 7th 2019. Department of Metallurgical and Material Engineering, NIT Raipur.

Patent Filed:

1. V.Kanthe, S.V. Deo and M. Murmu, (2019), “Fly ash and Rice husk ash triple blend concrete” on 22.03.2019.
2. K.Vijay and M. Murmu (2019), “Method for Preparation of Self-Repairing Concrete” on:21/08/2019.
3. Kuruva Venkateswarlu, S.V.Deo, Meena Murmu(2022), “An Internally Cured Self-Compacting Concrete And Method of Preparation Thereof” on:25/02/2022

Life Membership

INSDAG (Professional membership)

Indian Concrete Institute

Indian Building Congress

American Concrete Institute

Indian Road Congress

Indian Society of Structural Engineers

Indian Institute of Bridge Engineers

Extra-Curricular Activities:

Institute level:

Member of Anti ragging committee

Member of House Allotment Committee

Member of Security Committee

Member Eclectika committee

Invited Talk and GUEST LECTURE DELIVERED:

- 1. Dr. Meena Murmu**, USE OF INNOVATIVE MATERIALS FOR ROAD CONSTRUCTION, Rural Connectivity Training and Research centre (RCTRC), Government of Chhattisgarh, 23/09/2021.
- 2. Dr. Meena Murmu**, USE OF INNOVATIVE MATERIALS FOR ROAD CONSTRUCTION, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 30/10/2021.
- 3. Dr. Meena Murmu**, USE OF INNOVATIVE MATERIALS FOR ROAD CONSTRUCTION, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 11-11-2021.
- 4. Dr. Meena Murmu**, Concrete Technology, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 28/12/2021
- 5. Dr. Meena Murmu** New/ Innovative Technology, Rural Connectivity Training and Research centre (RCTRC), Government of Chhattisgarh, 01-09-2022
- 6. Dr. Meena Murmu**, Quality control of concrete, Rural Connectivity Training and Research centre (RCTRC), Government of Chhattisgarh, 12-02-2020.
- 7. Dr. Meena Murmu**, Emerging trends in Civil Engineering, SRIT Ananthapur, 21/12/2019
- 8. Dr. Meena Murmu**, Advances in Concrete Technology, OPJINDAL, 12-02-2018
- 9. Dr. Meena Murmu**, "Mix Design and Self-Healing of Concrete ", OPJINDAL, 30/05/2020
- 10. Dr. Meena Murmu**, Innovative material in cement concrete, fiber concrete, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 20/09/2018

11. **Dr. Meena Murmu**, Innovative material in cement concrete, fiber concrete, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 07-07-2018
12. **Dr. Meena Murmu**, Concrete Technology, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 28/09/2021
13. **Dr. Meena Murmu**, Concrete Technology, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 24/02/2022
14. **Dr. Meena Murmu**, Concrete Technology, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 25/02/2022
15. **Dr. Meena Murmu**, Concrete Technology, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 04-08-2022
16. **Dr. Meena Murmu**, Mix Design, Rural Connectivity Training and Research Centre (RCTRC), Government of Chhattisgarh, 05/12/2021

17. **Dr. Meena Murmu** New/ Innovative Technology, Rural Connectivity Training and Research centre (RCTRC), Government of Chhattisgarh, 01-09-2022
18. **Dr. Meena Murmu**, Cell Filled concrete, Rural Connectivity Training and Research centre (RCTRC), Government of Chhattisgarh, 21/02/2021
19. **Dr. Meena Murmu**, “Latest Mix Design” in five days short term hands on training programme “Testing Methods in Civil Engineering Construction” under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur on 17.11.2015.
20. **Dr. Meena Murmu**, “Industrail Building” one days workshop on training programme Industrail Building and Application of Composite Materials Civil Engineering , under TEQIP-III at Civil Engineering Department, Chattishgarh Swami Vivekanand Technical Bhilai (C.G.) on 26.03.2018.
21. **Dr. Meena Murmu**, “Cell Filled concrete and Fiber reinforced Concrete” Five days workshop on Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials , (Under Sponsored Research Project funded by HSMI, HUDCO, New Delhi) at Civil Engineering Department, National Institute of Technology Raipur on 27.09.2018.

ADMINISTRATIVE EXPERIENCE:

Worked as a member of Panel for interview for post of Junior Engineer, Staff Selection Commission, Govt. of India.

Worked as a member of selection committee for post of Faculty in Chemistry Engineering Department.

Worked as an Analyzer of the question paper for Junior Engineer Recruitment

Test Result conducted by Chhattisgarh Professional Examination Board Raipur (CGVYAPAM).

SEMINAR / WORKSHOP / CONFERENCE / CONVENTION ATTENDED

Two Week ISTE STTP on Introduction to Structural Engineering, under National Mission on Education through Information and Communication Technology by Page 2 of 2 IIT Kharagpur, 4-9 January, 2016.

One week on Advanced Data Analysis management by IIT Delhi, 14-18 December 2015.

Two day Workshop on “Water Resources in developing countries: Planning and management” “27-28 August 2015 at NIT Raipur

Two day workshop on “Collection Development of E-books in Libraries”, organized by Central Library, NIT, Raipur during 14th- 15th November 2014.

Workshop on "Academic Ethics and IPR" on 4th and 5th April 2014, Organized by National Institute of Technology Raipur and Chhattisgarh Council of Science and Technology, held at National Institute of Technology Raipur.

One week National Workshop on “Visual Modflow” Organized by Department of Civil Engineering, National Institute of Technology Raipur at NIT Raipur from 18-22nd November 2013.

SHORT TERM COURSE / SEMINAR / WORKSHOP ORGANISED:

Organized five days short term hands on training programme “Testing Methods in Civil Engineering Construction” under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur from 16th November to 20th November 2015 as organizing member.

Organized two days workshop “Water Resources in Developing Countries: Planning and Management under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur on 27th and 28th August 2015 as organizing member.

Organized one day workshop under research project “Construction of Low Volume Roads on Soft Subgrade Soil Improved by Locally Available Marginal Materials” funded by Human Settlement Management Institute (HSMI), HUDCO New Delhi at Civil Engineering Department, National Institute of Technology Raipur in association with HSMI, HUDCO New Delhi on 14th August 2015 as organizing member.

Organized one day workshop “Research Schemes in DST & Recent Advances in Civil & Transportation Engineering” under TEQIP-II at Civil Engineering Department, National Institute of Technology Raipur on 1st August 2015 as organizing member.

Ph. D Awarded : Four

Ph. D Guidance : Ongoing Five

link for

Google scholar

<https://scholar.google.com/citations?user=gtHJClwAAAAJ>

Scopus citation

<https://www.scopus.com/authid/detail.uri?authorId=56619060700>

