* **Name**: Dr. Tarun Kumar Rajak
* **Designation**: Assistant Professor and HOD
* **Department/School**: Civil Engineering
* **Institution Name**: Shri Shankaracharya Institute of Professional Management & Technology Raipur
* **Email ID**: t.rajak@ssipmt.com
* **Contact Number**: 94790947905
1. **Educational Qualifications**

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| **Degree** | **Specialization** | **Institution** | **Year of Completion** |
| UG | B.E. Civil Engg., | CSVTU | 2013 |
| PG | M.Tech Geotechnical Engg., | NIT Agartala | 2015 |
| Ph.D. | Geotechnical Engg | NIT Raipur | 2020 |

1. **Teaching & Research Experience**
* **Total Teaching Experience**: 5 Years
* **Industry Experience**: NIL
* **Research Experience**: 5 Years
1. **Courses Taught**

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| **UG Course** | **Basic Civil Engg., Building Material, Concrete Technology, Geotechnical Engg., Foundation Engg., Construction Management**  |
| **PG Course** | **Advanced Foundation Engg., Advanced Concrete Technology, Advanced Construction Management** |

1. **Research Interests / Specialization**
* Slope Stability, Ash Dyke Desing, Coal Mine Dump Stability, Ground Improvement Techniques, Concrete Technology.
1. **Publications (Last 5 Years)**
* **Journals:**
1. Khandel, R. K., Rajak, T. K., Verma, S., Mehta, D., & Rathnayake, U. (2024) 2D Finite Element Model To Understand The Behaviour Of Deep Excavation With Diaphragm Walls And Strut Members Suranaree J. Sci. Technol. 31(4):010316 (1-13).
2. Chadee, A. A., Malani, S. R., Pandey, A., Verma, S., Sharma, A., Mehta, D., & Rajak, T. K. (2024). Comparison of the Test Results of Conventional Concrete with Sulphur-coated Aggregate Concrete.
3. Rajak, T. K., Yadu, L., Chouksey, S. K., & Dewangan, P. K. (2021). Stability analysis of mine overburden dump stabilized with fly ash. *International Journal of Geotechnical Engineering*, *15*(5), 587-597.
4. Rajak, T. K., Yadu, L., & Chouksey, S. K. (2020). Strength characteristics and stability analysis of ground granulated blast furnace slag (GGBFS) stabilized coal mine overburden-pond ash mix. *Geotechnical and Geological Engineering*, *38*(1), 663-682.
5. Rajak, T. K., Yadu, L., Chouksey, S. K., & Dewangan, P. K. (2020). Strength characteristics and stability analysis of GGBS stabilised fly ash-overburden dump. *International Journal of Mining, Reclamation and Environment*, *34*(9), 625-648.
6. Rajak, T. K., Yadu, L., & Chouksey, S. K. (2020). Effect of fly ash on geotechnical properties and stability of coal mine overburden dump: an overview. *SN Applied Sciences*, *2*(5), 973.
7. Dwivedi, S., Bajaj, D., Sahu, D., & Rajak, T. K. (2023). Acoustical and heat characterization of recycled fibre reinforced bricks. *Materials Today: Proceedings*, *74*, 1042-1051.
8. Dhadiwal, A. J., & Rajak, T. K. (2023). Near surface mounting technology with glass fibre reinforced polymer and sisal rope fibre for flexural strengthening of reinforced concrete beams. *Materials Today: Proceedings*, *74*, 836-842.
9. Rajak, T. K., & Pal, S. K. (2015). CBR values of soil mixed with fly ash and lime. *International Journal of Engineering Research & Technology*, *4*(2), 762-768.
* **Conference Proceedings:**
1. Rajak, T. K., Yadu, L., Chouksey, S. K., & Pal, S. K. (2017, December). Strength characteristics of fly ash stabilized soil embankment and stability analysis using numerical modelling. In *Indian geotechnical conference* (pp. 14-16).
2. Thakre, A., & Rajak, T. K. (2022, June). Utilization of Waste Sole Leather with Fly Ash for Self-Compacting Concrete. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1032, No. 1, p. 012002). IOP Publishing.
3. Rajak, T. K., Mishra, A., & Yadu, L. K. (2022, March). Effect of GGBS on Strength Characteristics and Stability of Pond Ash Mixed Soil Embankment. In *IOP Conference Series: Earth and Environmental Science* (Vol. 982, No. 1, p. 012049). IOP Publishing.
* **Book Chapters / Books Authored:**
1. Rajak, T. K., Yadu, L., & Pal, S. K. (2018). Analysis of slope stability of fly ash stabilized soil slope. In *Geotechnical Applications: IGC 2016 Volume 4* (pp. 119-126). Singapore: Springer Singapore.
2. Rajak, T. K., & Yadu, L. (2023). Assessment of Mine Overburden Dump Stability Using Numerical Modelling. In *Geoenvironmental and Geotechnical Issues of Coal Mine Overburden and Mine Tailings* (pp. 39-61). Singapore: Springer Nature Singapore.
3. Rajak, T. K., Yadu, L., & Alam, M. P. (2021, October). Numerical, ANN, and MLR Modelling for Stability Analysis of Coal Mine Overburden Dump. In *Indian Young Geotechnical Engineers Conference* (pp. 297-308). Singapore: Springer Nature Singapore.
4. **Research Guidance**

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| **Level** | **Awarded** | **Ongoing** |
| Ph.D. | NIL | NIL |
| PG | 10 | 7 |

1. **Awards & Recognitions**
* Institutional / National / International:
1. Best Paper Award at International Conference on Innovative and Sustainable Technologies in Civil Engg., (2021).
2. Member BOS, Anjaneya University, Raipur, Chhattisgarh
3. Joint Secretary, Indian Geotechnical Society, Raipur Chapter
4. Reviewer at Several Journals of Springer Publication
5. **Administrative Roles**
	1. **Head of Department**
6. **Professional Memberships**
* IEI, IGS, IRC
1. **Web Presence**
* Personal academic webpage / Google Scholar / ResearchGate / ORCID

Google Scholar: <https://scholar.google.com/citations?user=B2Hx7-8AAAAJ&hl=en>

ResearchGate: <https://www.researchgate.net/profile/Tarun-Rajak>

ORCID: <https://orcid.org/0000-0002-0165-3500>