

### Faculty Sample Profile

<b>Faculty Name</b>	Dr. T. R. Mudgal
<b>Designation</b>	Associate Professor (Physics)
<b>Qualification</b>	Ph.D, M.Sc., SET (UGC)
<b>Email</b>	trmudgal@gecnilokheri.ac.in
<b>Area of Interest</b>	Palaeomagnetism, Rock Magnetism, Environmental magnetism, Airglow.
<b>Work Experience (Total)</b>	20
• Teaching	20
• Research	13
• Industry	-
• Others	-
<b>Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level</b>	Engineering Physics, Semiconductor Physics, Electromagnetic Theory, Mechanics, Waves and Optics, Engineering Physics Lab, Semiconductor Physics Lab.
<b>Membership of Professional Bodies</b>	ISTE, IAPT, ISCA, Indian Red Cross Society
<b>Research Publications</b>	22
• Research Papers UGC-CARE	04
• Research Papers SCOPUS	03
• Research Papers WoS/SCI/ABDC	04
• List of Publications	Enclosed as Annexure-1
<b>Book and Chapter Publications</b>	
• Publication of Chapter in Edited Books	02
<b>Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference</b>	
• International (Within Country)	16

• National	14
• List of published papers	Enclosed as Annexure-5
<b>Organizing National Conference/ International Conference/ FDP/STTP</b>	02 (FDP)
• List of Conference/FDP/STTP committee	Enclosed as Annexure-6

### **Research Papers Published in Journals:-**

1. Kumaran, K.P.N., Shindikar, M.R., and **Mudgal, T.R.**, (2004). Floristic composition, palynology and sedimentary facies of Hadi mangrove swamp (Maharashtra). Journal of Indian Geophysical Union, 8, 55–64. (**ESCI**). IF:0.313.
2. Rajshekhar, C., Gawali, P.B., **Mudgal, T.R.**, Reddy, P.R. and Basavaiah N., (2004). Micropaleontology and mineral magnetic evidences of the Holocene mudflats of Navlakhi, Gulf of Kachchh, Journal of Indian Geophysical Union, 8, 71-77. (**ESCI**). IF:0.313.
3. **Mudgal, T.R.**, Ved Parkash and Sanjay Dahiya, (2011). Analysis of climate and Solar climate Using Artificial neural Networks, Proceedings of National Conference LASER-11, May 2011, 360-365.
4. Sanjay Dahiya, Ved Parkash and **Mudgal, T.R.**, (2012). Comprehensive Approach for Cross Compatibility Testing of Website. -Conference on Recent Trends in Mathematics and Computing 2011 RTMC 10/6695-1083 International Journal of Computer Applications Proceedings on National Workshop-Cum ISBN: 973-93-80868-17-8. Published by Foundation of Computer Science, New York, USA.
5. Sanjay Dahiya, Ved Parkash and **Mudgal, T.R.**, (2013). Dating of Pashan Lake sediments using Geomagnetic Inclination. Proceedings of 2nd International Conference ESTEEM-2013, March 2013, 464-466.
6. Ved Parkash, Sanjay Dahiya, and **Mudgal, T.R.**, (2013). Redressal Measures in Virtulisation System Secutity Threats. Proceedings of 2nd International Conference ESTEEM-2013, March 2013, 467-471.
7. **Mudgal, T.R.**, Susheel Kumar, Latika Chaudhary, Berwal, Y.P.S. (2014). Autonomic Computing Revolutionizing the way of Managing Complex Systems. International Journal of Advanced Research in Computer Science and Software Engineering Vol. 4, issue 1, 398-402. ISSN: 2277 128X. IF-2.08.
8. **Mudgal, T.R.**, Susheel Kumar, Latika Chaudhary (2015). Security and Privacy in Wireless LAN. International Journal of Computer & Mathematical Sciences. Volume 4, Issue 5, 36-41. ISSN 2347 – 8527. IF- 2.58.
9. **Mudgal, T.R.**, Susheel Kumar, Sanjay Dahiya, Ved Parkash (2015). Tool kit of Environmental Magnetism. International Journal of Scientific Research. Volume 4, Issue 10 , 142-44. ISSN 2277-8179.
10. Priya Dhuria, **Mudgal, T.R.**, (2016). Role of High temperature Superconducting Materials for Innovations and Technology. International Journal of Advanced Technology in Enginering and Science. Volume 4, Issue 8, 612-21. ISSN 2348-7550.

11. Puneet Chawla, **Mudgal, T.R.**, Sanjay Dahiya and Ved Parkash (2016). Electric and Magnetic Field Management. International Journal of Advanced Technology in Engineering and Science. Volume 4, Issue 8, 669-76. ISSN 2348-7550.
12. **Mudgal, T.R.**, Puneet Chawla, Sanjay Dahiya and Ved Parkash (2017). Computational Applications of Environmental Magnetism in Study of Environmental Changes at Navlakhi, Gulf of Kuch. International Journal of Advance Research in Science and Engineering, Volume 6, Issue 1, ISSN 2319-8354.
13. **Mudgal, T.R.** and Puneet Chawla (2021). Impact of Pandemic COVID-19 on Technical Education: A case Study of a Government Engineering College of Haryana (India). Akshar Wangmay, UGC Care Listed, International Research Journal, ISSN: 2229-4929, January 2021, Special Issue, Volume- VI, 103-106.
14. **Mudgal, T.R.**, Puneet Chawla and Sanjay Dahiya (2021). Role of Science and Technology in upgradation of Learning Process During Pandemic Covid-19: a Comparative Study of Phase-I and Phase-II of Corona Virus at a Government Engineering Institute, Haryana (India). Modern Thamizh Research (A Quarterly International Multilateral Thamizh Journal) 3 to 5 June, 2021 - Special Issue (ISSN : 2321-984X), 219-224.
15. **Mudgal, T.R.** (2021). Magnetic Susceptibility: A Proxy parameter in Study of Palaeoclimate. Akshar Wangmay, UGC Care Listed, International Research Journal, ISSN: 2229-4929, July 2021, Special Issue, Volume- I.
16. **Mudgal, T.R.**, Ved Parkash, R.D.Mohite, and YPS Berwal (2021). Magnetism and Environmental Issues, Akshar Wangmay. UGC Care Listed, International Research Journal, ISSN: 2229-4929, October 2021, Special Issue, Volume- I, 50-53.
17. **Mudgal, T.R.**, Praveen, B.Gawali and R.D.Mohite (2022). Application of Environmental Magnetism in Reconstruction of Paleoenvironment in Mangrove Sediments: a Case Study of Mumbai, Maharashtra, India. IJBPAS, ISSN: 2277-4998, January, Special Issue, 2022, 11(1): 551-565. (**ESCI, Web of Science Journal**). **IF: 1.318**.
18. Dhanaji, M. Mohite, Pandurang, M. Chavhan, R.D.Mohite and **Mudgal, T.R.** (2022). Waste water Treatment: A Perspective of Nanotechnology. International Journal of Mechanical Engineering, ISSN: 0974-5823, January, Special Issue, 2022, 07(2): 61- 68. (**SCOPUS**). **IF: 2.1**.
19. Puneet Chawla, **Mudgal, T.R.** and Sanjay Dahiya (2022). Reduction in voltage drop of distribution feeders using bifurcation technique - A case study of 11kV feeder of 220kV subdivision. AIP Conference Proceedings 2463, 020048 (2022); <https://doi.org/10.1063/5.0080752>, Published Online: 02 May 2022. ISBN (**SCOPUS**). **ISBN: 9780735441927**.
20. Mohite, R.D., and **Mudgal, T.R.** (2022). Investigation of Polycyclic Aromatic Hydrocarbons (PAHs) Contamination in the Airoli Mangrove Sediments Using Environmental Magnetic Methods. International Journal of Early Childhood Special Education (INT-JECSE), ISSN: 1308-5581., June, Special Issue, 2022, 14(1): 395-402. (**ESCI, SCOPUS**). **IF: 0.29**.
21. Mohite, R.D., **Mudgal, T.R.** and Kataria, K.K. (2023). An Application of Magnetic and Geochemical Techniques to Determine Pollution Load in Leafy vegetables in the Industrial Area. Handbook of Research on AI-Equipped IoT Applications in High-Tech Agriculture, IGI Global, DOI: 10.4018/978-1-6684-9231-4, Ch. 17, pp 313-325, EISBN: 9781668492338.
22. Kumar Ankit, **Mudgal, T.R.**, Ram Neetu and Yadav Vandana (2025). A Note on Existence and Controllability Results on Fractional Sobolev-type Differential System of Order  $\alpha \in (0, 1)$  in a Banach Space. Advances in Mathematics: Theory Methods and Applications, River Publishers, 71-87. ISBN: 978-87-7004-668-8 (E-book).

### **International Conferences Attended and Paper Presented:-**

1. 3-4 March, 2013- International Conference on Evolution in Science and Technology & Eye on Educational Technologies, PPIMT, Hisar.
2. 22-23 November, 2013- International Conference on Advanced Information Communication Technology in Engineering, TITS, Bhiwani.
3. 8-9 March, 2014- International Conference on Evolution in Science and Technology & Eye on Educational Technologies, PPIMT, Hisar.
4. 27<sup>th</sup> August, 2016 – International Conference on Recent Innovations in Sciences, Management, Education and Technology, JCDMC, Sirsa.
5. 20<sup>th</sup> November 2017- International Conference on Recent Innovations in Science, Agriculture, Engineering and Management, GKV, Talwandi Sabo.
6. 6<sup>th</sup> February 2021- International Conference on Interdisciplinary View on Socio-Economic, Educational, Management, Environmental, Research, Language and Sustainable Development in Covid-19 Pandemic Situation interdisciplinary view on socio-Economic, Educational, Management, Environmental research language and sustainable Development in Covid-19 Pandemic Situation, Gondwana University, Gadchiroli.
7. 5-6 June 2021- International Conference on Eco-Errisa 2021, ECOR Foundation, Cochin.
8. 19-20 June 2021- International Conference on Recent Innovations in Science & Technology (RIST 2021), ERANAD Knowledge City Technical Campus, Malappuram, Kerala.
9. 12 June 2021- International Conference on Post Covid Challenges in Education Industry & Digital Economy, R Z Shah College of Arts Science and Commerce Mithagar Road, Mulund (E), Mumbai.
10. 12 July 2021- International Conference on Challenges of Higher Education in India to compete with Global level, Night College of Arts and Commerce, Ichalkaranji.
11. 9-10 August 2021- Virtual International Conference on Multifunctional Advanced Materials (vicmam-2021), JNAN Vikas Mandal's Degree College, Airoli, Navi Mumbai.
12. 27-28 August 2021- International Conference on Recent Advances in Basic and Applied Sciences, BMU, Rohtak.
13. 7 December 2021- International e-Conference on Sustainable Development goals in South Asia: key issues Opportunities and Challenges, University of Kelaniya, Sri Lanka.
14. 28 January 2022- International e-Conference on Ecology, Economy, Emerging Technology, and People for Sustainable livelihood in SAARC Countries, RMGM, Khed, Maharashtra.
15. 25-26 May 2022- International Global, Regional and Local Perspectives on Livelihoods: Health care, Wildlife, Water, Energy, Agriculture, Climate Change and Geo-Spatial Technologies, Coal City University, Nigeria.
16. 11-12 June 2022- An International Conference “MILIEURA”, on the occasion of World Environment Day June 5, 2022, organised by ECOR Foundation, Cochin, India.
17. 12 August 2022- An International e-Conference on modern research in Science, Social Science, and languages, organised by Bharat Mahavidyalaya, Jeur (C.RLY).
18. 30 November 2022- International E-Conference on Recent Interdisciplinary Studies in Agriculture, Forestry and Allied Sciences organised by Savitribai Phule Mahila Mahavidyalaya, Satara.
19. 4 January 2023- International Conference on paradigm Shift Transformation Industry -4.0 organised by KC Group of Institutions, Nawanshahar (Pb) & Pandoga (HP).

20. 18 November 2023- An International Conference on Sustainable Natural Research Resource Research organised by Society for Ecological Sustainability, Bhawanipatana, Odhisa.

**National Conference Attended and Paper Presented:-**

1. 21<sup>st</sup> May, 2011- National Conference on Recent Trends in Mathematics and Computing, TITS, Bhiwani.
2. 26-27 May, 2011- National Conference on Latest Advancements in Science, Engineering and Research, BFCET, Bathinda.
3. 20-22 May, 2012- National Conference on Climate Changes and Environmental Problems: Reasons, Consequences and Remedies, JCDMCOE, Sirsa.
4. 29 March, 2014- National Seminar on Innovative Trends in Information and Communication Technology, MMPG College, Fatehabad.
5. 9-10 March, 2015- National Conference on Emerging Trends in Physics and material Science, CDLU, Sirsa.
6. 10 October, 2015- National Conference on Recent Innovations in Applied Sciences and Humanities, RIET, Faridabad,
7. 19-20 March, 2016- National Conference on Emerging Trends in Physics and material Science, CDLU, Sirsa.
8. 18<sup>th</sup> October, 2019- National Conference on Engineering Technology and Innovations Management beyond 2020, Bharat Group of Colleges, Sardulgarh.
9. 20<sup>th</sup> February, 2020 - National Conference on ENEHCST-2020, JCDMPG college, Sirsa.
10. 10<sup>th</sup> August 2021- National Conference on Scope and Opportunities to build Professional Career in Chemistry, SIAS College, Tiruvannamalai, Tamilnadu.
11. 25<sup>th</sup> August 2021- Virtual Multidisciplinary National Conference on Research Perspectives, Development and Innovation, JNAN Vikas Mandal's Degree College, Airoli, Navi-Mumbai.
12. 26<sup>th</sup> August 2021- National Seminar on Modern Trends in Quality Education, J.C. Bose University of Science and Technology, YMCA, Faridabad.
13. 27<sup>th</sup> December 2022- Workshop on Renewable Energy and Energy Conservation, State Institute of Engineering and Technology, Nilokheri, Karnal.
14. 20<sup>th</sup> January 2024- 6<sup>th</sup> Research Convention on Towards A Resilient Economy: Digitalisation, Transformation and Green Innovation, Institute of Technology and Science, Ghaziabad.
15. 29<sup>th</sup> February 2024- Workshop on Renewable Energy and Energy Conservation, State Institute of Engineering and Technology, Nilokheri, Karnal.