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This is to certify that Prof./Dr./Mr./Ms. AJAY RADKE of
Vidyavandhini's College of Engineering and Technology, Vasai has participated & presented a paper titled
Study of Confined and unconfined Structural members as Column in
THEEM-2023 held on 28th & 29th April 2023 at Theem College of Engineering, Boisar (E), Dist. Palghar - 401501.

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STUDY OF CONFINED AND UNCONFINED STRUCTURAL MEMBER AS COLUMN

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ABSTRACT:

Traditional steel ties reinforcement cannot provide superior confinement for reinforced concrete (RC) columns due to the constraints on tie spacing and disturbance of concrete continuity. Columns in any Framed Structure are most important as they carry heavy loads of Slabs, Beams and various lateral loads, and channelize these loads evenly to the Foundation. Additionally, because concrete is weak under tension, the column needs extra reinforcement to retain enough ductility, which may be done by adding Confinement Reinforcement. The specimens will be cast in vertical position simulating the construction field and they were tested under concentric compression till failure. We will be casting 3 unconfined column and six confined column in which three will be of welded wire mesh with spacing of 1inch and remaining three will be of 0.5 inch. We will also cast total 9 column of size (7500 x 250 x 250mm). The results will indicate that the columns, confined with proposed lateral reinforcement, revealed significant improvement in the strength and ductility and test under universal testing machine. The results might indicate that the columns, confined with proposed lateral reinforcement, revealed significant improvement in the strength and ductility.