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GEOGRAPHICAL INDICATIONS			
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APPLICANT NAME	VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY		
TITLE OF INVENTION	AI BASED PREDICTION MODEL, METHOD FOR THE COMPRESSIVE STRENGTH OF GEOPOLYMER CONCRETE		
FIELD OF INVENTION	CHEMICAL		
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(57) Abstract :

An AI based prediction model (1), method for the compressive strength of geopolymer concrete comprising four layers: a 1-dimension convolutional layer (2), a flatten layer (3), two dense layers (3A), multiple fully connected layers (4); an output layer (5). The input parameter groups comprises Group 1, Group 2, Group 3, Group 4; wherein group 1: features with significant impact on geopolymer concrete's strength; wherein group 2: features pertaining to fly-ash's composition; wherein group 3: features with ratios utilized to predict geopolymer concrete's strength; wherein group 4: the top 12 features from groups 1, 2, and 3 that performed well across three feature. Two criteria are used to select an ideal set of input parameters wherein the first is each feature's influence on compressive strength and the second is each feature's influence on the model used to predict strength.

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