

Leveraging Convolutional Neural Networks (CNN) for the Real-Time Classification of Melt-Fraction of Phase Change Materials (PCMs) Using Infra-Red (I.R.) Imaging

N. Pachpande, A. Sen, D. Banerjee

J. Mike Walker '66 Department of Mechanical Engineering, Texas A&M University, College Station, Texas

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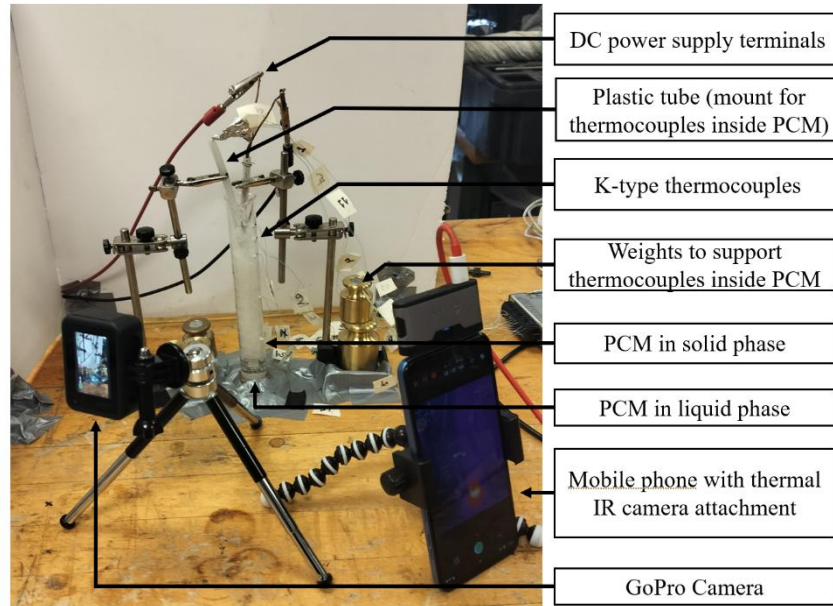


FIG. 1. Experimental apparatus employed in this study, consisting of a graduated measuring cylinder containing the phase change material, an embedded heater coil, and K-type thermocouples.

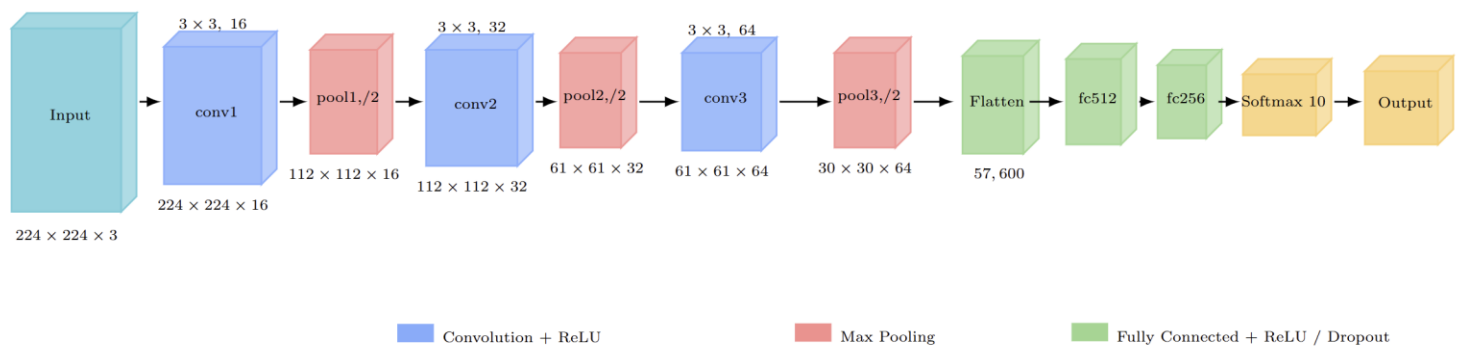


FIG. 2. Convolutional neural network architecture employed for classification of melt-fraction levels from infrared images.