

## Assignment#2

CH5650: Molecular Data Science and Informatic  
Jan-May, 2025

**Due Date: Feb 14, 2025 (Online Submission, <https://courses.iitm.ac.in/>)**

**More information will be added to this assignment as we learn new concepts in the classes on Jan 28 and Jan 29.**

Build following models for predicting the hardness of an alloy which is made of six elements – Al, Co, Cr, Cu, Fe and Ni.

1. A liner regression model
2. A polynomial regression model
3. Random forest (RF) models – compare the performance of three RF models each with varying number of trees. You could choose RF with 5, 10 and 15 trees.

Submit your code and a PDF file with the models description and result.