

1. Slip Systems Concepts:

- a. Define a slip system in a crystalline material
- b. Why is it important?

2. Resolved shear stress calculation:

A single crystal of a BCC metal has a critical resolved shear stress of 18 MPa. What is the yield stress of this crystal in the $[110]$ direction if slip occurs in the $(101)[\bar{1}\bar{1}]$ slip system?