<table>
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<th>Instructor</th>
<th>Department</th>
<th>Institute</th>
<th>Email</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Anandh Subramaniam</td>
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<td><a href="mailto:anandh@iitk.ac.in">anandh@iitk.ac.in</a></td>
<td>09919699410</td>
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**Course Outline**

1) Bonding and Crystal Structure  
2) Defects in Crystalline Solids  
3) Diffusion  
4) Phase Diagrams  
5) Phase Transformations  
6) Microstructure and its effect on Properties

**Text/References:**

1) E-book on Materials Science and Engineering by Anandh Subramaniam, NMEICT Project, MHRD.  

**Suggested hyperlinks:**

1) http://home.iitk.ac.in/~anandh/E-book.htm  
3) http://www.tf.uni-kiel.de/matwis/amat/def_en/  
4) http://hyperphysics.phy-astr.gsu.edu/hbase/hframe.html

**Suggested /Additional Readings**

1) Elementary Crystallography by Martin J. Buerger, John Wiley & Sons  