TEQIP workshop on  
High Resolution X-Ray and Electron Diffraction  

01 - 05 February 2016  

Student Feedback  

<table>
<thead>
<tr>
<th>Questions</th>
<th>Excellent</th>
<th>Good</th>
<th>Ordinary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity of communication about workshop</td>
<td>18</td>
<td>7</td>
<td>00</td>
</tr>
<tr>
<td>Organization of the sessions</td>
<td>21</td>
<td>04</td>
<td>00</td>
</tr>
<tr>
<td>Quality of lectures</td>
<td>21</td>
<td>04</td>
<td>00</td>
</tr>
<tr>
<td>Quality of posters</td>
<td>12</td>
<td>11</td>
<td>00</td>
</tr>
<tr>
<td>Effectiveness of discussions</td>
<td>11</td>
<td>14</td>
<td>00</td>
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<tr>
<td>Effectiveness of learning experience</td>
<td>12</td>
<td>12</td>
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<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Short</th>
<th>long</th>
</tr>
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<tbody>
<tr>
<td>Duration of workshop</td>
<td>20</td>
<td>01</td>
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<table>
<thead>
<tr>
<th>Definitely</th>
<th>Maybe</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>Would you like to have more such sessions?</td>
<td>22</td>
<td>01</td>
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<tr>
<td>Would you like e-lectures by experts on special topics?</td>
<td>20</td>
<td>03</td>
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Suggest specific topic that you would like additional expert lectures on  

- Transmission Electron Microscopy  
- Analysis of TEM microscopy  
- Ferroelectric, Dielectric and Magnetic properties of materials.  
- Texture for welding sample and corrosion part  
- Analysis of characterized data.  
- Study of nanomaterials characterization.  
- Energy based materials function on its structure like thermo electric methods.  
- AFM, APM and X-Ray Tomography.  
- X-Ray diffraction advanced topics like X-Radia, X-ray Tomography  
- Do more experimental include it propagation.  
- Fatigue and fracture analysis of alloy processed by SPD.  
- HRTEM  
- Solidification.  
- More lectures on micro & Macro texture.  
- In detail lectures on texture EBSD reciprocal space.  
- Molecular dynamics simulations (LAMMPS)  
- Mechanical behaviour of materials.  
- TEM, SEM & HRTEM
Additional Suggestions

- Need some more lectures on EBSD in future.
- 5 days is slightly too long.
- The course work during workshop should be lab oriented.
- Time spent for complex topics like reciprocal space mopping & LPA can be more.
- Do more experiments.
- Also explore the new soft skill other than exp. work.
- Including of SAED for cubic materials.
- May be included hands on practices.
- A dedicated workshop on molecular dynamics simulations involving experts from inida and abroad will be good for exposing students like us to simulations like us to simulations domain.
- Operating procedure of HRXRD & HRTEM.
- Regarding microscope TEM no clarity in discussion.
- Hands on should be more focussed with the lecture part.

Learning

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Do you get enough class projects?</td>
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<td>03</td>
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<tr>
<td>Is the learning adequate?</td>
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<td>02</td>
</tr>
<tr>
<td>Do you have sufficient resources for laboratory</td>
<td>10</td>
<td>06</td>
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</tbody>
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What is your area of specialization

- Texture
- Texture of stainless steels
- Physical metallurgy; coating
- Welding behaviour & phase transformation.
- Polycrystalline Transparent Ceramics.
- CNT/Polymer composites.
- Materials Characterization.
- Half time to lecture of the programme and other half time of laboratory visit.
- Fatigue & fracture.
- Physical & Mechanical Metallurgy.
- Nanocrystalline Materials
- Metallic glasses.
- Characterization of materials
- Microwaves
- Wear (thermal spray coating)
- Ultra high temperature ceramic composites
- Nanomaterials

<table>
<thead>
<tr>
<th>Is the library/journal support/e-connection adequate?</th>
<th>Sufficient</th>
<th>inadequate</th>
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<tbody>
<tr>
<td></td>
<td>14</td>
<td>06</td>
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<th>Maybe</th>
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<tbody>
<tr>
<td>Would you like to have common (TEQIP) repository of course</td>
<td>21</td>
<td>01</td>
<td>00</td>
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<tr>
<td>Would you like to visit IITK to attend specialized courses?</td>
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<td>00</td>
<td>00</td>
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<tr>
<td>Would you like MOOCS/e-resources based courses?</td>
<td>22</td>
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| How can TEQIP help improve your learning? | By lecture experts from this improves my knowledge  
By listening the valuable lectures given by the experts on various topics.  
Expand to depth to which analysis can be done.  
Yes, it provide us platform to interact with expertise  
So many minds on simple platform makes me more inquisitive about topic.  
Yes, it provide us platform to interact with expertise & share their experience with us.  
Organize workshops on latest trends in research correlated to real world applications.  
By conducting more specific workshops like the we attend at IITK  
Help to explore new stuffs  
Ideas generated for different process  
Run the learning course quality in region wise IIT  
Please give proper hands on.  
Conduct frequent workshops like this on varied topics.  
Demonstrating equipments for practicality.  
Provide or organize some core experimental course like SEM, optical Microscopic.  
Conducting workshop like this.  
Student like us should be given more exposure to these kind of expert talks which help to enhance interaction.  
Organize additional training program  
Preferences (books, journals) by lecture. |
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<tr>
<td>Would you like to visit an IIT for a short visit/internship/post-doctoral stint, if offered (via TEQIP)?</td>
<td>25</td>
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<tr>
<td>Would you like to share/use research infrastructure at IITK, if made available?</td>
<td>25</td>
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<tr>
<td>Would you like to conduct collaborative research with IITK faculty?</td>
<td>24</td>
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<tr>
<td>Would you like lectures by experts (Indian and international) on niche research areas/topics?</td>
<td>25</td>
<td>00</td>
<td>00</td>
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<tr>
<td>Do you want special-topic conferences?</td>
<td>25</td>
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| How can TEQIP help improve your research? | ➢ I received very new exposure, which I will try to introduce in my journey of research.  
 ➢ I improved certain level by listening lectures. I planned for Nano Indentation characterization by attending TEQIP programme in 2014  
 ➢ Free facility to use instrument in any TEQIP institute.  
 ➢ TEQIP should emphasize or enhancing workshop interactions so that we can learn more from global experts.  
 ➢ Also I request TEQIP to fund more for participants  
 ➢ Provide lab facility during workshop at extra time after class session.  
 ➢ By providing/organizing workshops for experimental and analysis techniques.  
 ➢ Collaboration & sharing of facilities as well as collaborative cutting edge research work.  
 ➢ Increase no of experimental classes  
 ➢ Analysis must be different.  
 ➢ Give more demonstration to lab visit.  
 ➢ Hands on experience of equipments  
 ➢ Just like this workshop all institutes under TEQIP should share the facilities at low cost than others  
 ➢ Yes, such type of workshop conducted by TEQIP improve our technical skills as well as our research knowledge.  
 ➢ So many new research work by different professor gives lots of information.  
 ➢ Yes, by providing such type of workshop & conferences to enhance my knowledge.  
 ➢ By organizing this type of lectures by expert in the area of texture in future too. |
|---|---|