

CHEMICAL AND MATERIAL SCIENCES

Summary of Faculty Feedback

TEQIP Knowledge Incubation Centre

22-23/02/2014

Total attendance- 26

Workshop

Questions	Excellent	Good	Ordinary
Clarity of communication about	11	15	00
Organization of the sessions	12	14	00
Quality of lectures	09	17	00
Quality of posters	02	10	03
Effectiveness of discussions	12	14	00
Effectiveness of learning experience	12	14	00
	Appropriate	Short	long
Duration of workshop	22	04	00
	Definitely	Maybe	No
Would you like to have more such	21	04	02
Would you like e-lectures by experts on special	21	03	00
Suggest specific topic that you would like additional expert lectures on	<ul style="list-style-type: none">· Chemical Reaction Engg., Chemical Technology· Thermodynamics,· Characterization, nanomaterials, colloid properties.· Designing of mass transfer equipments contacting devices.· Reactor design, Desing using Aspen-Hysis· Bio-materials, Phase diagrams & Mechanical properties.· Nano materials, Social issues related material uses and over uses.· Mechanical properties of material.· Topics of advanced material science like composites and steel making.· A workshop on curriculum review in the presence of industry experts and teachers.· Role of chemical engg in Biotechnology to resolve energy crisis.· Topic related to advances in subject.· Statistical Thermodynamics, CFD, Control Optimization, Ad. Reaction Engg. Polymers/Advanced Materials.		

Additional Suggestions

- Brief description of defects on M.S and Thermo.
 - Discussion in Chemical Engg. courses should have been more elaborate.
 - Discussion of content of 20% basic sciences (physics & chemistry) in the curriculum of UG courses in chemical & material engg. elective courses which can be offered by applied sciences faculty including lab components.
 - This kind of workshop should also be offered by physics deptt.
- May need to reorganize the seminar in terms of broad clarification of mett. Engg.
- Lectures should be more specific and clear.
- To improve technical education in Uttar Pradesh kindly recruit regular technical teachers.
- There is need of twicing some courses on the mind set of b.tech students what they really wanted to do after b.tech and further career opportunities.
 - If examinations lik GATE are important then some short courses should be definitely for their preparations.
 - Lecture duration should be at least of one hour.
 - A bit better advance planning would have helped.

Teaching

<p>Which subjects do you teach?</p>	<ul style="list-style-type: none"> · Chemical reaction engg. · Thermodynamics mechanics of materials. · Statistical methods · Mass transfer, equipment design. · Reaction engg. design, Process calculations, Heat Transfer. · Material and energy balance, Mass Transfer, Process plant design. · Applied Chemistry. · Applied Physics. · MSE , Bio-materials. · TOM, CT, MEMS · Fluid Mechanics, Thermodynamics. · Machine design, Material Science. · CRE. · Fluid Flow Operations, Chemical Process Industries. · Process Modelling and Simulation. · Chemical Reactions Engg. , Bio Process Principles. · Transport Phenomena. · APDC, EPMC, CT. · Polymers.
<p>What is average student to teacher ratio in your institute?</p>	<ul style="list-style-type: none"> · 20:1 · 20:1 · 20:2 · 22:1 · 16:1 · 26:1 · 50:1 · 50:1 · 15:1 · 25:1 · 20:1 · 15:1 · 15:1 · 25:1 · 25:1 · 20:1 · 20:1 · 20:1 · 20:1 · 05:1

Questions	YES		NO	
Do you have additional support for teaching (tutors, graders, teaching Assisttants, etc)?	8		14	
Do you give class projects for UG classes?	21		04	
Do you give class projects for PG classes?	14		6	
Do you have sufficient resources for laboratory courses?	13		10	
	Sufficient		Inadequate	
Is the library/journal/e-connection support adequate?	14		12	
	Definitely	May be	No	
Would you like to have common (TEQIP) repository of course material?	17	06	00	
Would you like to visit IITK to participate in and develop course material (existing or new)	21	04	00	
Would you like to participate in creation of the repository material (course files/lab. Manuals/question bank/etc)	18	04	01	
	e-courses	Workshops	Content	none
How can IITK effectively help you prepare for teaching?	14	13	12	00
How can TEQIP help improve your teaching?	<ul style="list-style-type: none"> • Interact by student more. • Exposure to different teaching techniques. • By providing funding to attend the conference. • By conducting this type of workshop again in future. • By Institute-Institute interaction and by Institute-Industry Interaction. • Through adoption of standard curriculum which matches the needs of the Industry and R&D centres. • By conducting workshops on specific topics of IITs. • Facilitating frequent interaction & discussing. • Workshop on core subjects. • More workshops on teaching methodologies. • A workshop on teaching methodologies for a week is necessary in every academic year. Also TEQIP can provide more funds to state engg. colleges to improve their infrastructure & labs. • It can support resources development. • It can provide wide range of course and expertise on the subjects materials. • Study material and videos. • Don't know can co-ordinate with NPTEL. • If TEQIP can arrange workshop on courses which are tough at UG and PG level by faculty from IITs. 			

Research

Questions	Definitely	Maybe	No
Would you like to visit an IIT for a visiting-faculty/post-doctoral fellow ,if offered(via TEQIP)?	16	06	02
Would you like to share/use research infrastructure at IITK, if made available?	21	03	01
Would you like to conduct collaborative research with IITK?	19	04	01
Would you like lectures by experts (Indian and international) on niche research areas/topics?	18	04	01
Do you want special-topic conferences?	16	08	01

How can TEQIP help improve your research?

- To conduct workshop, e-learning programme.
- Interaction.
- By providing funds for the purchase of research equipments.
- Providing infrastructure for research, having interaction with researchers of other institutes.
- Providing the option of using research facilities in all institutes, visit by experts in both student/exchange mode.
- By providing the option of using research facilities using research facilities available at IITs.
- Travel grants & Procurement.
- By providing opportunity to work together with faculty members at IITK during summer & winter vacations.
- By making available the laboratory facilities where possible.
- TEQIP can improve research by providing research opportunities to the teachers of all institutions by including them in Phd programs, projects and others areas according to their qualification.
- More funds can be raised to the state govt. Engineering college for developing new research facilities at their premises.
- TEQIP can provide more facilities at institute premises.
- TEQIP can give financial support for research.
- It can help by giving additional thoughts on research area.
- By extending lab facilities.
- By sharing library and other resources