

TEQIP School on Mechanics of Reinforced Polymer Composites

22-25 January, 2017

Student Feedback

Workshop

Questions	Excellent	Good	Ordinary
Clarity of communication about workshop	12	20	3
Organization of the sessions	14	19	1
Quality of lectures	15	18	2
Quality of posters	5	19	3
Effectiveness of discussions	8	14	4
Effectiveness of learning experience	4	19	3
	Appropriate	Short	long
Duration of workshop	18	11	2
	Definitely	Maybe	No
Would you like to have more such		9	3
Would you like e-lectures by experts on special topics?	27	7	
Suggest specific topic that you would like additional expert lectures on	<ul style="list-style-type: none"> • Modelling of composites by software. • Elaborate discussion on damage mechanics and damage evaluation on composite material. • Thermoplastic polymer matrix composite (PMC) manufacturing & fabrication • I want to attend in future special expert lectures on these topics along with programming software like MATLAB. • Some exclusive lectures on lingo cellulosic polymer composites if possible. • Issues & challenges on the manufacturing process of composites. • FEM formulation using MATLAB coding. • More topics from fracture mechanics. • Damage mechanism of laminates. • Analysis of hybrid composites (Inter and Intra Hybrid composites.) • Experimental testing. • Lab work • Matlab Simulation. • Non-linear analysis of elements such as beams, plates and specially shells • Finite element formulation using MATLAB • The topic should also cover all the aspects related to nano-composite and their applications. 		

	<ul style="list-style-type: none"> • Biomedical application of polymer composite. • Non-linear modelling of smart composite structures. • Fabrication of composite materials and characterization of the same after validation or analysis of different type of composite materials. • Non-linear finite element analysis and evolution of new materials for biomedical applications. • Related to fluid dynamics. • Model making issues in some commercial softwares. • Multiscale Modelling • Mathematical Modelling • Numerical modelling. • Some software talks should be arranged.
Additional Suggestions	<ul style="list-style-type: none"> • In teqip workshops, some lectures are very short & some lectures are very long • Should organize such schools on regular basis • Practical labs has to be added more so that we can learn by seeing more. • Giving chance to young speakers is appreciable but not at the cost of their level of delivery & ease. Rest all is more than sufficient. • Handouts & some worksheet should be provided with in the lecture. There should be checking or analysis of the level of understanding. • Conduct such schools on regular basis as they are very helpful for students and gives them exposure to the recent researches in their field. • Organize workshops more true to specific topics rather than covering broader view and do try to organize lectures in proper orders. • Hands out or work sheets should be given during the workshop and also test should be taken to analyse the level of understanding. • If any session is not relevant then we should not be forced to attend this. • Please try to address all aspects of polymer composite (physical, chemical and biological) • Arrange at least 5 days workshop because the APF index is zero for less than this. So please take this in your consideration. • Please make sure to arrange equipments in future to perform some experiments related to the topic covered in workshop. • If you arrange complete lab work in which making composite, testing and analysis in any software then it would be more beneficial for research work. • It would be better if there is more focussed approach on lab visit and real time work apart from theory lecture. • Sessions are very big, the timings of session have to be reduced. • Need few more testing labs. • Hands on software environment • Programming Assignments. • Sessions are very big please make it shorter & easier. • Invited talks by prominent speakers will help alot. • Course content, lecture delivery and articulate of idea conveyed is very good.

Learning

Questions	Yes	No	
Do you get enough class projects?	19	10	
Is the learning adequate?	24	8	
Do you have sufficient resources for laboratory	12	18	
What is your area of specialization	<ul style="list-style-type: none"> • FEA of composite • Design • Mechanical • Machine design • Manufacturing & automation. • Polymer Matrix Composite • Composite Materials (Production) • Composite Materials. • Natural fibre Reinforced polymer composites. • CAD/CAM • Non-Linear dynamics of plate structure. • Machine Design. • Design composite • Civil Engg • ME CADM • Mechanical [CAD-CAM] • Composites Structures FEM • Composite Structure, Static Analysis • Machine Design • Polymer Composites • Short composite beam • Nano biotechnology • Biomedical • Metal Matrix Composites • Nanotechnology • Geometric & Material Non Linearity of smart composite structural. • Natural fibre based hybrid composite material. • Nano composite • Heat transfer • Structural Engg • Structures. 		
	Sufficient	inadequate	
Is the library/journal support/e-connection adequate?	15	11	
	Definitely	Maybe	No
Would you like to have common (TEQIP) repository of course material?	26	3	3
Would you like to visit IITK to attend specialized	26	4	2
Would you like MOOCS/e-resources based courses?	18	9	2

<p>How can TEQIP help improve your learning?</p>	<ul style="list-style-type: none"> • By covering new topic in research • By conducting workshops and by giving opportunity to us for attending it. • Providing Financial support. • By giving specific assignments related to my field. • These types of school should be very frequent and number of participants should be less for effective learning. • Helping researchers who are interested but lack resources, helping by making resources available by allowing to work with IITK or any other possible help. • By making different opportunities available to students. • By organizing support talks on our fields. • By providing more expert talks & lab work. • Duration of scholars and workshops can be extended to get adequate understanding of any topic. • Expert talk should stick to the topic given, as topic was on polymer composite there should be synthesis. • Expert should be called from different field to cover the entire topic. • Expert called for lecture should be of adequate knowledge. • By conducting more and more workshops at proper intervals related to our research work. • More workshops • Funding for resources.
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Research

Questions	Definitely	Maybe	No
Would you like to visit an IIT for a short visit /internship/post-doctoral stint ,if offered(via TEQIP)?	32		1
Would you like to share/use research infrastructure at IITK, if made available?	29	4	
Would you like to conduct collaborative research with IITK faculty?	29	4	1
Would you like lectures by experts (Indian and international) on niche research areas/topics?	28	5	
Do you want special-topic conferences?	28	4	1

How can TEQIP help improve your research?

- Co-ordination and collaborative research in academic projects
- It helps me in better understandings about composites.
- Providing the facilities available at IIT to the non-IIT institute who do not have the facilities to carry out research study.
- By providing facilities, funds to the research scholars so that we can perform our research projects/experiments without any difficulty.
- By providing lab facilities and financial support.
- By providing an opportunity with your esteemed laboratories. Either the practical work or may be the simulation work frame on any software.
- TEQIP should run these types of programme very frequent and different institute other than IIT.
- Frequent seminars and conferences will help to improve the research.
- By providing expert lectures on composite structures.
- Lectures on various other fields.
- By providing certain other facilities such as software (Modelling and Analysis) and workshop session to work with them.
- TEQIP should provide distinguished students of masters course with some fund to develop the experimental setup for their respective research work.
- Sharing of facilities among TEQIP funded institute.
- By providing the laboratory facilities and made easily available for conducting the experimental work.
- TEQIP funded institute should be bound to cooperate with each other at various level of research involving lab access, instruments access, and characterization support.
- There is lack of research facility in some of university for research work. So for using lots of research facility in IIT. Please arrange the 6 months internship facility for research scholars and write it to all TEQIP funded institute to allow to go to any IIT for using research facility for researcher.
- Some universities are not willing to send their research students to do internship or lab works to other universities where all resources for research are available. If TEQIP convinces these universities and make a group at a platform for single goal, then it would be right step towards my research or for other fellows.
- I am studying about how the problems are behaving when it subjected to lateral loads, this workshop let me to know how this composite materials are behaviour based on ply evolution and their combined. It would be useful for further improve my research.

	<ul style="list-style-type: none">• 1 month research internship with reputed faculty along with some stipend.• To arrange good & effective topics so that no IITian gets from IITs.
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