

Department of Biochemical Engineering and Biotechnology
Faculty Board Meeting (03/2016-17)

November 5, 2016

The 3rd Departmental Faculty Board Meeting of 2016-17 was held on 28th October 2016 at 3:30 pm in the Departmental Committee Room (I-230). The following members were present:

1.	Prof. Atul Narang	Chairman
2.	Prof. G.P. Agarwal	Member
3.	Prof. P. K. Roychoudhury	Member
4.	Prof. Saroj Mishra	Member
5.	Prof. A.K. Srivastava	Member
6.	Prof. T.R. Sreekrishnan	Member
7.	Prof. Prashant Mishra	Member
8.	Dr. Shilpi Sharma	Member
9.	Dr. Ritu Kulshrestha	Member
10.	Dr. Ravikrishnan Elangovan	Member
11.	Dr. Z.A. Shaikh	Member
12.	Dr. Stefan Oehler	Special Invitee
13.	Dr. Ashish Misra	Convener

Item No. 1. Confirmation of minutes of 1st DFB meeting (2016-17)

The minutes of the 2nd DFB meeting (2016-17) were confirmed as circulated, with the following change for Item No. 3. The board nominated Dr. Shilpi Sharma and Dr. Z.A. Shaikh as additional members of the Curriculum Review & Development committee of the department.

Item No. 2. Matters arising from the above meeting

None

Item No. 3. Director's feedback on departmental faculty recruitment and streamlining of the process

The HOD informed the board about the Director's feedback regarding faculty recruitment in the department. The Director stressed the need for prompt and flexible faculty hiring in view of the inability to shortlist candidates for Assistant Professor in the recent round of selections. To address this, the board agreed upon the following suggestions and recommendations.

No.	Suggestion	Recommendation
1	Wider advertising of departmental hiring	Design targeted hiring ads for science and engineering faculty and advertise them in leading scientific journals and portals.

2	Streamline shortlisting of rolling ads	Assigned following faculty for shortlisting faculty rolling ads on a monthly basis – Dr. Ritu Kulshrestha and Dr. Preeti Srivastava for biology, and Dr. Z.A. Shaikh for engineering.
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Item No. 4. Departmental courses for the 2017 calendar year

The HOD suggested equitable allotment of courses for the entire year after classifying the courses as ‘large’ or ‘small’ based on the number of students in the class. It was also recommended that Assistant and Associate Professors not share courses with Professors because it confounds their teaching evaluations. However, Professors were free to share courses with each other.

Based on the above, each faculty member was allocated in the coming year one ‘large’ and one ‘small’ class or three ‘small’ classes. The board then decided on the course distribution for the 2017 calendar year [**Annexure 1**]. The board also decided that two new faculty members would offer the seminar course (BBQ) every semester.

Item No. 5. Discussion of curriculum review and development committee meeting

The minutes of the first curriculum review & development (CRD) committee meeting were presented to the board [**Annexure 2**]. The board concurred with the observations in the CRD minutes including the need for eliminating overlapping experiments between courses, and recommended that the matter be taken up with the respective course coordinators

Item No. 6. Lab/Instrument repair in the department

The HOD presented estimates for lab/instrument repairs and AMCs received from various labs [**Additional excel file attachment sent with email, ‘Lab and Equipment Repair and Maintenance Estimates.xlsx’**]. It was noted that repairing (or signing AMCs for) equipment in the Instrumentation and UG labs would, by itself, consume several lakhs. Consequently, repair would focus on shared equipment in various labs (3 HPLCs in instrumentation lab, repair of 3 shared spectrophotometers in bioprocess lab, M.Tech lab, instrumentation lab, Adolf-Kuehner shaker and UG lab and other shared equipment and instruments).

Item No. 7. Discussion of class committee meetings

The board decided to take this item up in the next DFB.

Item No. 8. Correspondence for technical staff requirements

The board was notified about the letter sent to Mr. Ramesh K. Thareja (AR, E-2 and Manpower Training) on September 20, 2016 with a request for hiring six technical staff in the department [**Annexure 3**].

Item No. 9. Feedback on circulated proposal for establishment of the Department of Design

The board did not have any specific comments in this regard

Item No. 10. Discussion on circulated proposal of admission of international students at the IITs

The board did not have any specific comments in this regard

Item No. 11. Discussion on subscription of circulated list of journals for 2017 renewal

The board was of the opinion that journals 3 (Applied & Environmental Microbiology), 5 (Biocatalysis & Biotransformation) and 13 (Journal of Bacteriology) were being used by the departmental faculty. The board suggested renewal of all three journals.

Item No. 12. Discussion on circulated proposals to float new courses by various departments

- a. Physics
- b. HSS
- c. Applied Mechanics
- d. CBME
- e. Applied Mechanics
- f. Textile Technology

The board had the following comments in regard to the circulated proposals to float new courses from all departments.

S. No	Questionnaire	Yes/No
1.	Do the courses contents have any overlap with the courses offered by your Deptt/Centre?	No
2.	Are any students of your Department likely to be interested in this course(s)?	Yes
3.	Is the LPT structure of the courses, in your opinion consistent with the scope of the courses as per syllabus?	Yes
4.	Any other suggestions/general remarks that would help BPGS in considering the proposal?	No

Item No. 13. Any other items with the permission of the Chair

The board discussed the recent request by SBS for room I-336 on the grounds that their faculty strength is slated to increase. The board recommended that a strong opposition to this request since our department is expected to expand even more (to a final strength of 25 faculty members).

Ashish Misra
Convener-designate, DFB

Distribution

All DBEB faculty by email

Cc: Office file

Annexure 1

	PC	but large class as all 48 students of 2013 entry will take
	PE	4 PE required 8 PE offered
	DE	3 DE required 6 DE offered

Large DC/PC		Small DE/PE/PC		Small DE/PE/PC		Small DC/DE			
	Sem		Sem		Sem		Sem		
AN		BBL736 (Dynamics of microbial systems)	2	BEL850 (Advanced Biochem)	1			AN	
TRS	BBL732 (Bioprocess Plant Desig)	1	BBL742 (Biol Waste Treatment)	2				TRS	
SM		BBL737 (Instrumentation & Analytical Method)	1	BBL746 (Current Topics in B)	2			SM	
SN	BBL432 (Fluid Solid Systems)	2	BEL820 (Downstream Processing)	1				SN	
AKS	BBL331 (Bioprocess Engg)	1	BBL740 (Plant Cell Technology)	2				AKS	
PM	BBL131 (Principles Biochemistr)	1	BBL747 (Bionanotechnology)	2				PM	
GPA	BBL731 (Biosep Engg)	1	BBL445 (Membrane Applications)	2				GPA	
VSB	BBL431 (Bioprocess Tech)	2	BEL810 (Enzyme & Microbial Technology)	1				VSB	
MNG		BEP840 (Lab Tech in Microbial Biochemistry)	1	BBL343 (Carbohydrates & Li)	2	BBL447 (Enzyme Catal)	2	MNG	
DS	BBL434 (Bioinformatics)	2	BBL735 (Genomics & Proteomics)	1				DS	
SS	BBL132 (Gen Microbiol)	1	BEL830 (Microbial Biochemistry)	1				SS	
RK	BBL733 (Recomb DNA Tech)	1	BBL749 (Cancer Cell Biology)	2				RK	
PS	BBL231 (Mol Biol & Genetics)	1	BBL745 (Combinatorial Biotech)	2				PS	
RKE	BBL433 (Enzyme Sc & Engg)	2	BBL446 (Biophysics)	2				RKE	
AM		1	BBL734 (Metabolic Regulation & Engg)	1	BBL443 (Modeling and Simu)	2	BBP332 (Bioprocess Er)	1	AM
ZAS	BBL133 (Mass Energy Balances)	1	BBL341 (Environmental Biotech)	2				ZAS	
			BBL750 (Genome Engg)	?					

Department of Biochemical Engineering and Biotechnology
Curriculum Review & Development (01/2016-17)

September 28, 2016

The 1st Departmental Curriculum Review & Development Meeting of 2016-17 was held on 27th September 2016 at 3 pm in the Departmental Committee Room (I-230). The following members were present

1.	Prof. Atul Narang	Chairman
2.	Dr. Preeti Srivastava,	Members
3.	Dr. Ashish Misra	Member
4.	Dr. Shilpi Sharma	Special Invitee
5.	Dr. Zia A Shaikh	Special Invitee
6.	Dr. Stefan Oehler	Special Invitee

The meeting was scheduled to discuss instrument and lab requirements for conducting the following labs:

BBL 131: Principles of Biochemistry

BBL132: General Microbiology

BBP332/BEL850: Bioprocess Engineering / Biochemical Engineering

BBL433: Enzyme Science and Engineering

Item1: Same experiments in multiple courses

The committee noted that the following labs in BBL131 (Biochemistry) were also being conducted in other courses.

No.	Experiment in BBL131	Also conducted in	Decision
1	Determinaton of reducing sugars by dinitrosalicyclic acid (DNS) method	BBP332/BBL433	Keep as part of BBL131; remove from other courses
2	Gel electrophoresis of DNA	BBL231	Conduct in BBL231 only. Add an experiment on 'Exercises in pipetting and dilutions 'to BBL 131
3	Ion exchange chromatography	BBL433	Conduct in both courses, but at different levels.

The committee also noted potentially overlapping experiments in BBL231 (Molecular Biology and Genetics) and BBL733 (Recombinant DNA Technology). It was decided to hold another meeting with the respective course coordinators (Prof. Saroj Mishra for BBL733 and Dr. Ritu Kulshrestha for BBL231) to go over the experiments.

Item 2: Purchase of new equipment for UG lab

The committee noted an urgent need for ordering the following equipment for the UG lab.

Sr No	Item	Units	Unit cost (Rs. Lakhs)	Aprox. cost (Rs. Lakhs)	Buyer
1	Shaker Incubator	1	2	2	ZAS
2	Microscope	8	0.25	2	SS
3	Weighing balance	2	1	2	AM
4	Autoclave (small)	2	1	2	PS
5	Vortex	16	0.05	0.8	ZAS
6	Minispin	16	0.05	0.8	AM
7	Water bath	2	0.5	1	AM
8	UV spectrophotometer	1	3.5	3.5	SS
9	Fermenter	3	5	15	AN
10	Gas analyzer	1	4	4	AN
11	Colony counter	2	0.4	0.8	SO
12	Horizontal gel tank	1	0.5	0.5	PS
13	Power supply	1	0.5	0.5	PS
14	Dry bath	2	0.5	1	SO
15	Fridge, large	1	0.5	0.5	AN
Total				36.4	

The committee assigned buyers for the equipment to be ordered, and decided to form purchase committees for procuring the equipment. Additionally, the committee decided to meet periodically to monitor the status of the equipment purchase.

The meeting ended with a vote of thanks to all members.

Atul Narang.

Atul Narang



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September 20, 2016

Mr. Ramesh K. Thareja
 AR, E-2 and Manpower Training

Sub: Technical staff requirements for DBEB
Ref no: IITD/Estt-2/Rectt/2016/2650 dated September 6, 2016

Dear Mr. Thareja,

Since 2004, the following seven technical staff members of DBEB retired or will retire within a year.

Name of Technical Staff	Employee code	Position (Area of expertise)	Retirement date	Involved in conducting lab course numbers
Keshav Prasad Bahuguna	25703	Senior Mechanic	30/04/2004	
Ganpati Yadav	26097	Technical Supdt. (Electrical)	31/10/2009	
Jalil Ahmed Khan	26087	Technical Supdt. (Electrical)	31/01/2010	
Dharam Veer Sharma	26145	Technical Supdt. (Refrigeration)	31/12/2013	BEL850, BBP332, BBL731
Bhagwan Singh	26150	Technical Supdt (Biochemistry)	31/01/2015	BBL131, BBL433
Shanti Prakash Rana	26207	Technical Supdt (Biochem Engg)	30/04/2016	BEL850, BBP332, BBL731
Kishan Chand	26214	Sr Lab Asst (Microbiology)	31/05/2017	BBL132, BBL231, BBL733, BBL735

During the same period, the department hired only the following three new staff members.

Name of technical staff	Employee code	Position	Joining date
Sumit Kapoor	26813	Jr Tech Supdt	02/07/2008
Anish Raju	26927	Jr Lab Asst	18/01/2013
Gulshan Dass	27075	Sr Mechanic	17/09/2015

Evidently, we need four technical staff members just to replace the staff members who have retired or will retire within one year. In addition, due to the increased student intake, we have been teaching 60% more students for the last three years. We need **two** more Junior Technical Superintendents to conduct labs for the increased UG and PG classes. In short, we need six Junior Technical Superintendents, the details of which are given below:

Technical Staff Requirement	Area of expertise	To be involved in conducting lab course numbers	To be involved in research labs
JTS1	Electrical Engineering with specialization in refrigeration	BEL850, BBP332, BBL731	All
JTS2	Biochemistry	BBL131, BBL433	PG lab, PEL, SBL, BRL,
JTS3	Microbiology	BBL132, BBL231, BBL733, BBL735	BRL, RNAI, RNAII, UG lab
JTS4	Chemical Engineering	BEL850, BBP332, BBL731	Process, WTL, DSP, Pilot Plant
JTS5	Analytical Chemistry	BBL737	Central Instrumentation lab I and II
JTS6	Mechanical Engineering	UG lab,	All

Finally, please note that we would like to interview the personnel assigned to our department. Since we are accountable to the Administration for our performance, it would be very helpful to seek our input in the hiring process.

Best regards,

Atul Narang.

Atul Narang
Head, DBEB