

Department of Biochemical Engineering and Biotechnology

Minutes of the Departmental Faculty Board Meeting

(DFB-04/2021-2022)

February 17, 2022

The fourth meeting of the *Departmental Faculty Board* for the academic session 2021-2022 was held on **February 17, 2022** through video conferencing (Microsoft Teams in the *DBEB FB channel*).

The following members were present:

Prof. D. Sundar	Chairman
Prof. T.R. Sreekrishnan	Member
Prof. Sunil Nath	Member
Prof. Prashant Mishra	Member
Prof. Atul Narang	Member
Prof. K.J. Mukherjee	Member
Prof. Preeti Srivastava	Member
Prof. Ziauddin S. Ahammad	Member
Prof. Ravikrishnan Elangovan	Member
Prof. Ashish Misra	Member
Prof. Lucinda E. Doyle	Member
Prof. Ishaan Gupta	Member
Prof. Ritu Kulshreshtha	Convener

1. Confirmation of the minutes of the 3rd meeting of the DFB for the session 2021-2022 held on Jan 27, 2022.

The minutes of the meetings were confirmed as circulated

2. Matters arising out of the minutes of the above meeting

The buyers of various items from PLN03 and NPN05 budgets were requested to settle the bills at the earliest possible date (**Annexure 1**)

3. Courses to be floated in *Special Lab Semester (Apr 25 - Jun 04, 2022)* and *Semester 1, 2022-23*.

The Board initially discussed the core course preferences indicated by the faculty members in response to the request of HoD dated 28-01-2022 (**Annexure 2**). It was emphasized that any UG program offering department like DBEB should ideally be prepared for any flux like superannuation, faculty leaving, sabbaticals, medical leave, maternity leave, CCL, etc, in any semester. This can be ensured by having multiple faculty members who should step-in to offer the UG Core Courses. The Board finalized the courses to be floated in *Special Lab Semester (Apr 25 - Jun 04, 2022)* and *Semester 1, 2022-23* as given in **Annexures - 3A and 3B**. It was decided to identify Course Coordinators for the engineering-based courses in consultation with the Institute Administration.

4. MI grant for operation of DBEB Instrumentation Facility.

The board was informed by the HoD about the creation of a separate MI grant at IRD entitled '*MI for the operation of DBEB Instrumentation Facility (MI02847)*' to receive user charges for lab facilities of the department (**Annexure 4**).

5. Generating revenue through user charges for the maintenance of departmental equipment/facility. (follow-up of item # 8 of DFB-02/2021-2022 minutes dated Oct 13, 2021)

The HoD presented the details of the departmental equipment/facility currently listed in *Institute Central Research Facility (CRF)* (**Annexure 5**). The board then discussed the need for developing a sustainable model for maintenance of departmental facilities and the current arrangement with CRF. It was decided to continue with the existing model with CRF for external users and facilitate internal users (from within the Institute) who could possibly be asked to pay the user fees to MI02847).

6. Request received from departmental alumni for using Bioprocess Lab space and equipment. (follow-up of item # 10 of DFB-02/2021-2022 minutes dated Oct 13, 2021)

The HoD informed that the proposal submitted by departmental alumni, who wished to utilize the Bioprocess Lab facility, was scrutinized by the departmental faculty. It was informed that the alumni will themselves work in the lab for a few months on their own projects as part of their start-up. They will pay and use our equipment. No other intellectual or advisory or any other service will be provided by DBEB to the start-up. The MoU of the alumni with the Department was submitted to DDSP/Registrar and is currently under review by the Institute legal team. The board agreed to this arrangement and authorized the HoD to sign the MoU on behalf of the Department. The details are available in the departmental office for reference.

7. Matters for information of the DFB.

- a) The Head informed that the response to the 9th Internal Audit Report (01-04-2019 to 31-03-2021) related to the department was submitted to the DDO for providing ex post facto approval for settlement of these pending paras (copy emailed to DFB on 16-02-2022) & the meeting related to this that happened with DDO on 17-02-2022.
- b) The Head informed about the Third Party Evaluation of the progresses made under the Institution of Eminence (IoE) scheme that is currently underway during February 17-18, 2022.
- c) Prof. Ravikrishnan Elangovan (in-charge of the departmental student society BETA) informed that BETA has now been recommended for formal incorporation as a 'chapter' under CAIC by the EC of the CAIC in its meeting held on 07-02-2022, pending ratification by the General Body of CAIC. This BETA society will be different from the biotechnology club (iGEM) already listed under CAIC.

8. Any other item with the permission of the Chair.

None

The meeting ended with a vote of thanks to the Chair.

Ritu Kulshreshtha
Convener, DFB

Distribution

All Faculty (by email)

Status of purchases/pending settlement from PLN03 and NPN05

Budget Head	Sl.	Item	Amount	Status as on 16-02-2022	Buyer / Lab
NPN05	1	AMC for 03 nos. RO System supplying RO water to different LABs of Department. 01 no. RO installed at roof top of UG Lab & 02 Nos. RO installed at roof top of BRL Lab. (AMC Period : 01/10/2021 to 31/04/2022)	Rs. 18,000/-	PO issued. Invoice?	Dahiya/AN
NPN05	2	Connectors for EZ & ADI1018 thermo circulator	Rs. 24,990/-	PO issued, 31/01/2022. Invoice?	Himanshu/AN/ Bioprocess Lab
NPN05	3	replacement of electrode assay, reference for ion chromatography system	Rs. 62,500/-	Items Delivered, Invoice received 16/02/2022	Ansari/KJ/ Instrumentation Lab
NPN05	4	Heating Element of Applicon EZ control Reactor - Daspas make heating element	Rs. 8,850/-	Quotation Pending Expense Request Approval : 02/02/2022	Dahiya/AN
NPN05	5	Refilling of 01 Helium Cylinder for GCMS & CHNS Analyser & 02 Nitrogen Cylinders for Chromatography & GC	Rs. 22,220/-	PO issued, 10/02/2022. Items to be delivered mid of march.	Ansari/KJ/ Instrumentation Lab
PLN03	6	UPS 40 KVA 3 phase output with 30 min & 60 min backup	Rs. 6 Lacs	Item Delivered, Installation Pending	AM / Instrumentation Lab
PLN03	7	Ice Flaker Machine	Rs 2.5 Lacs	Item Delivered, Installation Pending	PS/UG Lab
PLN03	8	Micro plate Multi Volume Spectrophotometer	Rs 7 Lacs	PFC Booked, GTE approval awaited.	RK/Instrumentation Lab

(Action: Concerned buyers / faculty lab in-charges to settle the purchases ASAP)

UG Core Course Preference indicated by Faculty Members

(A)

SI	Faculty Member	Preference 1	Preference 2	Preference 3
1	Ashish Misra	BBL133	BBL331	BBP332
2	Atul Narang	BBL331		BBL731
3	Ishaan Gupta	BBL434	BBL231L	
4	KJ Mukherjee	BBL433	BBL331	BBL733
5	Lucinda E Doyle	BBL131	BBL132	
6	Prashant Mishra	BBL131	BBL132	
7	Preeti Srivastava	BBL231	BBL733	
8	Ravikrishnan Elangovan	BBL433	BBL331	BBP332
9	Ritu Kulshreshtha	BBL733	BBL231	
10	Shilpi Sharma	BBL132	BBL131	
11	Sreekrishnan TR	BBL732	BBL331	BBL432
12	Sundar D	BBL434	BBL733L	
13	Sunil Nath	BBL133	BBL432	
14	Shaikh Ziauddin Ahammad	BBL331	BBL732	BBL432

(B)

SI	Course Code	Course Name	Preference 1	Preference 2	Preference 3
1	BBL131	Principles of Biochemistry	PM, LED	SS	
2	BBL132	General Microbiology	SS	LED, PM	
3	BBL133	Mass and Energy Balances in Biochemical Engineering	AM, SN		
4	BBL231	Molecular Biology and Genetics	PS	RK	
5	BBL331	Bioprocess Engineering	AN, ZAS	AM, KJM, RKE, TRS	
6	BBP332	Bioprocess Engineering Laboratory			AM, RKE
7	BBL431	Bioprocess Technology			
8	BBL432	Fluid Solid Systems	SN		TRS, ZAS
9	BBL433	Enzyme Science and Engineering	KJM, RKE		
10	BBL434	Bioinformatics	IG, DS		
11	BBL731	Bioseparation Engineering			AN
12	BBL732	Bioprocess Plant Design	TRS	ZAS	
13	BBL733	Recombinant DNA Technology	RK	PS, DS	KJM

Courses to be floated in *Special Lab Semester* (Apr 25 – Jun 04, 2022)

Departmental Core Courses (DC)

SI	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot
			L	T	P			
1	BBL132P *	General Microbiology	0	0	3	1.5	SS	P
2	BBP332 #	Bioprocess Engineering Lab	0	0	3	1.5	AN	P
3	BBL231P \$	Molecular Biology and Genetics	0	0	3	1.5	PS	P

* for students who completed the lecture component in Sem 1 (2020-2021) and Sem 1 (2021-2022)
(for 2019-entry & 2020-entry students)

for students who completed the lecture component in Sem 1 (2021-2022)
(for 2019-entry students)

\$ for students who completed the lecture component in Sem 1 (2021-2022)
(for 2019-entry students)

Courses to be floated in Semester I, 2022 - 2023

Departmental Core Courses (DC)

SI	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot
			L	T	P			
1	BBL131	Principles of Biochemistry	3	0	3	4.5	LED	D
2	BBL132	General Microbiology	3	0	3	4.5	SS	F
3	BBL133	Mass and Energy Balances in Biochemical Engineering	3	0	0	3	TBD *	H
4	BBL231	Molecular Biology and Genetics	3	0	3	4.5	PS	D
5	BBL331	Bioprocess Engineering	3	0	0	3	TBD *	B
6	BBP332	Bioprocess Engineering Lab	0	0	3	1.5	TBD *	P
7	BBL731	Bioseparation Engineering	3	0	3	4.5	TBD *	C
8	BBL732	Bioprocess Plant Design	3	0	2	4	TBD *	B
9	BBL733	Recombinant DNA Technology	2	0	3	3.5	RK	D
10	BBQ301	Seminar Course – I	0	0	2	1	DS	Q
11	BBQ302	Seminar Course – II	0	0	2	1	TBD *	Q
12	BBD451	Major Project Part 1 (BB1)	0	0	6	3	IG	P
13	BBN101	Introduction to Biochemical Engg.	0	0	2	1	DS / HoD	M

Program Core Courses (PC)

SI	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot
			L	T	P			
1	BBL735	Genomics and Proteomics	2	0	2	3	IG	D
2	BBL737	Instrumentation and Analytical Methods in Bioengineering	2	0	2	3	DS / HoD	E
3	BBD851	Major Project Part 1 (BB5)	0	0	12	6	RK	Q
4	BBD852	Major Project Part 2 (BB5)	0	0	28	14	RK	Q

Program Elective Courses (PE)

SI	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot
			L	T	P			
1	BBL741	Protein Science and Engineering	3	0	0	3	DS	F

MSR / PhD Courses

SI	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot
			L	T	P			
1	BBD895	Major Project	0	0	72	36	KJM	Q
2	BBL810	Enzyme & Microbial Technology	3	0	0	3	TBD *	H
3	BBL830	Microbial Biochemistry	3	0	0	3	PM	J
4	BBP840	Lab Techniques in Microbial Biochem	0	0	4	2	PM	P
5	BBL850	Advanced Biochemical Engineering	3	0	4	5	TBD *	B

Course to be floated in the Non-Graded Unit (NGU) System and NOT in the ERP

SI	Course Number	Course Title	L - T - P Structure			Credits	Course Coordinator	Slot
			L	T	P			
		Design and Practical Experience (DPE) for BBD and BBT					AM	

* TBD - yet to be determined (Course Coordinators to be identified in consultation with Institute Administration)

INDIAN INSTITUTE OF TECHNOLOGY, DELHI
(Industrial Research & Development Unit)

No. IITD/IRD/NPI305/MI02487/ 12337

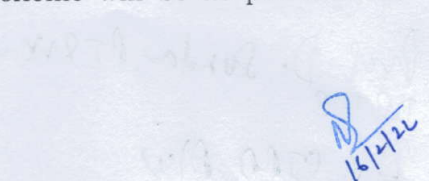
Dated: 16.02.2022

OFFICE MEMORANDUM

Approval of the Competent Authority is hereby conveyed for the creation of an MI activity titled "MI for the Operation of DBEB Instrumentation Facility" (MI02487) to receive user charges for Lab Facilities on the following terms & conditions:-

1. Prof. D. Sundar, Head, D.B.E.B. will be its PI & Coordinator (ex-officio).
2. The tenure of the activity will 03 years w.e.f. 08.02.2022.
3. The user charges received under this activity will be used towards maintenance of equipments etc. at D.B.E.B. will be deposited under the budget head "Miscellaneous" of this activity.

The other terms and conditions for operation of the scheme will be as per terms & conditions of the IRD/Institute.


A.R., IRD

DISTRIBUTION

1. Prof. D. Sundar, PI & Head
DBEB
2. A.R. (IRD A/c)

List of DBEB Instruments currently listed in CRF

Sl.	Instrument Name	Inventory Number
1	Atomic Absorption Spectrometer	18972/2005/1
2	CHNS Elemental Analyser	47356/2014/2
3	Fluorimeter	54979/2017/1
4	Fast protein liquid chromatography	28823/2008/1
5	Gas Chromatography	62121/2019/1
6	High Performance Liquid Chromatograph	55046/2017/1

Charges per sample (in Rs.) for the above instruments

User Type	Atomic Absorption Spectrometer	CHNS Analyser	Fluorimeter	Fast protein liquid chromatography	Gas Chromatography	High Performance Liquid Chromatography
IITD Users	155.00 Per Sample/ Element	1500/sample	210/sample	155/sample	350/sample	500 /sample
Outsider Students	310.00 Per Sample/ Element + 18% GST	4500/sample + 18% GST	410/sample + 18% GST	310 + 18% GST	1000/sample + 18% GST	1500 Per Sample + 18% GST
Govt. Research lab	620.00 Per Sample/ Element + 18% GST	5000/sample + 18% GST	510/sample + 18% GST	620 + 18% GST	1800/sample + 18% GST	2500 Per Sample + 18% GST
Industrial Research	1550.00 Per Sample/ Element + 18% GST	6000/sample + 18% GST	1110/sample + 18% GST	1550 + 18% GST	2500/sample + 18% GST	4000 Per Sample + 18% GST