

**Department of Biochemical Engineering and Biotechnology**  
**Minutes of DRC Meeting NO 06/2017-2018**

7th Feb, 2018

The sixth meeting of *Departmental Research Committee* (DRC) for the academic session 2017-2018 was held on **Wednesday, Feb 7, 2018** at **12 noon** in the Committee Room (I-230) of the Department.

The following members were present:

Prof. T. R. Sreekrishnan (*Chairperson*)  
Prof Saroj Mishra  
Prof A K Srivastava  
Prof. Prashant Mishra  
Prof Atul Narang  
Prof. D. Sundar  
Prof Ritu Kulshreshtha  
Prof. Preeti Srivastava  
Prof. R. Elangovan  
Prof. Z. A. Shaikh  
Prof. Ashish Misra  
Prof. Shilpi Sharma (*Convenor*)

1. To confirm the minutes of the 5th meeting of the DRC for the session 2017-2018 (*DRC-05/2017-2018*) held on 21st Dec 2017.

The minutes of 5th meeting of DRC 2017-18 held on 21st Dec 2017 were confirmed as circulated.

Minutes circulated by email dated Jan 1, 2018 concerning synopsis of Ms Shraddha Maitra (Entry No 2010BEZ8762) for her thesis entitled “Bioethanol production by *P. stipitis*: kinetic studies in a chemostat and development of genetic tools to overcome kinetic limitations” were also confirmed as circulated.

2. To report the matters arising from minutes of Meeting No. 05/2017-2018 and action taken.

➤ Agenda Item 5 (DRC-05/2017-2018): Modified cover sheet (attached as Annexure I) for submission of research grant application by departmental faculty members was approved. All faculty members were requested to use the same with immediate effect.

3. Approval of research plan of Ph.D. students:

(a) Ritu Bhardwaj (2016BEZ8007)

(b) Ngangom Pravina Devi (2016BEZ8008)

The Plan of Work for Ph.D. students Ritu Bhardwaj and Ngangom Pravina Devi were discussed, and approved on the basis of recommendations by the members of SRC.

(Action: Chairman DRC to forward the Form w/ enclosures to Dean - Academics)

4. Approval of new Ph.D. proposal by Prof. D. Sundar

New project entitled “Big data based leads for drug development from traditional home medicine” by Prof. D. Sundar was approved.

5. Allotment of project to new Ph.D. student (Jan 2018 entry)

The committee approved the allotment of the project “Big data based leads for drug development from traditional home medicine” to Ph.D. student, Navaneethan Radhakrishnan (Entry no 2017BEZ8438), under the supervision of Prof. D. Sundar.

6. Constitution of SRC for Ph.D. student (Jan 2018 entry)

The Committee discussed and constituted the SRC for Ph.D. student, Navaneethan Radhakrishnan (Entry no 2017BEZ8438), with the following members:

Chairperson	Prof. Ritu Kulshreshtha
Expert / Internal	Prof. Ravi Elangovan
Expert / External	Prof. Ashok Patel (KSBS)
Supervisor	Prof D Sundar

7. Formation of evaluation committees for students of BBD452

The evaluation committee for BBD452 students for semester II, session 2017-18 was constituted with the following members: Prof. T. R. Sreekrishnan, Prof. D. Sundar, Prof. R. Elangovan and Prof. A. Misra. The mid-sem evaluation of the students will be held as per academic calendar (on 16th Feb 2018). Also, it was decided that for evaluation 50% weightage will be given to the supervisor's marks, while the other 50% will be equally distributed across the other members of evaluation committee.

8. Request for ex-India leave for one year by Mr Rohit Khandelwal (2015BEZ8355)

The committee approved the request for ex-India leave for one year by Ph.D. student, Rohit Khandelwal (2015BEZ8355).

9. Application from Ms Nitu Maity (2015BEZ8502) for upgradation to SRF

Based on the recommendations by the student's SRC, the DRC recommended the upgradation of Ms Nitu Maity (2015BEZ8502) from JRF to SRF.

10. Allotment of MTP topics to two Dual Degree students (Entry year 2012)

Two departmental dual degree students were allotted the following MTP topics:

- (a) *Maneesh Kumar* (2012BB50024), under the supervision of Prof. G.P. Agarwal - Revisiting the characterisation and annotation of *Saccharomyces cerevisiae*
- (b) *Vivek* (2012BB50047) under the supervision of Prof. Atul Narang - Kinetic study of ethanol production by *Pichia stipitis* with xylose as carbon source in a chemostat

11. To report the matters for ratification by the DRC

(a) Project proposals submitted by departmental faculty

S. No	Project Title	Project Investigators	Funding Agency
1	Molecular surveillance of river water to contain the emergence and spread of antimicrobial resistance - A study in the Ganges river valley	Prof. Z. Ahammad & Prof. T. R. Sreekrishnan	DBT-BMBF
2	Development of a cell based microdevice platform for facile detection of infectious diseases	Prof. Ashish Misra	DST

The above projects were circulated to members, since no specific comments were received from the members on the proposal, the project was forwarded to Dean IRD and item was ratified in DRC.

(b) Request of Ph.D. student Ms. Swati Varshney (2016BEZ8325) for release of fellowship from the Institute.

The committee ratified the forwarding of application received from Ms Swati Varshney requesting Institute Assistantship for the period Jan 2018 to June 2018, to Dean Academics.

10. Any other item with the permission of Chair

(a) Synopsis of Ph.D. theses titled "Studies on the mechanism of glucose mediated repression of the lac operon of *Escherichia coli*: Role of inducer exclusion and positive feedback" submitted by Mr. Ritesh Kumar Aggarwal (Entry No 2010BEZ8846)

The Committee discussed and approved the synopsis submitted by the Ph.D. student Ritesh Kumar Aggarwal. The Committee also approved the panel of Examiners and authorized the Chairman to forward the same to Dean (Academics).

(Action: 1 Thesis Supervisor to send the following documents to the DRC Convener:

(a) Filled-in form for PhD synopsis submission & Appointment of Examiners

(b) 2 hard copies of the Synopsis and (c) soft copy of the Synopsis by email)

(Action 2: Upon receipt of the above documents, Chairman DRC to forward it to Dean-Academics)

(b) Request by supervisor (Prof. Sunil Nath) for change in MTP topic of students

- *Rishabh Sethi* (MTP I): Computer simulation of oxidative phosphorylation
- *Naresh K. Meena* (MTP I): Collection and evaluation of surface tension data on aqueous-organic systems
- *Priyanshu Agarwal* (MTP II): Surface effects at bio interfaces in aqueous solution.

The change in topics was approved.

(c) Nomination of senior research scholar for presentation on Science Day

In response to nomination requested by Dean Academics of upto three senior research scholars for presentations on Science Day, a sub-committee comprising of Prof. D. Sundar, Prof. P. Srivastava, Prof. Z. A. Shaikh and Prof. S. Sharma was constituted to look into the nominations from faculty members received by the deadline of 16th Feb 2018. The Committee was informed that the DRC convener had mailed the departmental faculty seeking nomination by 16th Feb 2018.

(d) Application dated 5th Feb 2018 received from Ph.D. student, Ms Nudrat Huda Khan (2015BEZ8356), towards her resignation with immediate effect.

The board agreed to forward the request to PG section.

(e) Criteria for evaluation of students registered for MTP II

The committee discussed the criteria for evaluation of MTP Part II students. MTP evaluation guidelines and evaluation sheet have been attached as Annexures IIa and b, respectively.

(f) Research Scholar Travel Award application of the following Ph.D. students was recommended to be forwarded to Dean Academics

S.No.	Student	Entry Number	Conference
1	Sanjay Kumar	2014BEZ8005	World Biotechnology Conference, Stockholm Sweden (June 25 -27, 2018)
2	Lovely	2014BEZ8002	-do-

The meeting ended with thanks to all members.

Shilpi Sharma  
Convener, DRC

### Distribution

All DRC members and other DBEB faculty (by email)



**(C). Regulatory Impact**

<b>Does this grant application require any of the CLERANCES listed?</b>			
If YES, please complete details below		No	Yes
<b>Indicate the relevant clearance required by ticking the relevant box</b>	<b>Has the relevant Committee's approval been received?</b>		
	<b>Yet to apply</b>	<b>Pending</b>	<b>Approval received dated</b>
<b>Institutional Bio-Safety Committee (IBSC)</b>			
<b>Ethical Clearance</b>			

**Declaration :**

<b>Principal Investigator's Certification</b>	
<p>(A) I certify that all details on this application are correct and that health and safety implications have been considered in the design of the project and necessary clearances will be obtained before execution.</p> <p>(B) No additional space is required as existing space is sufficient for the proposed work</p> <p>(C) Space needed is available in the department (indicate place &amp; approximate area)</p> <div style="border: 1px solid black; height: 20px; width: 600px; margin: 5px 0;"></div> <p>(D) No hazardous chemicals are required for the project</p>	
<b>Date:</b>	<b>Signature of the Principal Investigator</b>

**Signature of the Head of the Department**

## Annexure IIa

### MTP evaluation guidelines

MTP evaluations will be done **2 times** a semester based on the submission of a report and presentation made to the examiners. The 2<sup>nd</sup> evaluation for BBD852/854 will be in the presence of an external examiner. A soft copy of the report needs to be uploaded on [turnitin.com](https://www.turnitin.com) at least **3 days** before the evaluation.

#### Criteria for evaluation

Evaluation	BBD851/BBD853	BBD852/BBD854
1	<ul style="list-style-type: none"><li>• Understanding of project</li><li>• Literature survey</li><li>• Initial work done (BBD851)</li></ul>	<ul style="list-style-type: none"><li>• Work done and results</li><li>• Presentation of results and discussion</li><li>• Planning of future work</li></ul>
2	<ul style="list-style-type: none"><li>• Work done (methodology and initial results)</li><li>• Future course of work</li><li>• Planning of future work</li></ul>	<ul style="list-style-type: none"><li>• Overall understanding of project</li><li>• Explanation of results</li><li>• How the work done adds to the body of knowledge in the field</li></ul>

#### Grading Guidelines

	BBD851/BBD853	BBD852/BBD854
Midsemester	40% weightage	40% weightage
Final	60 % weightage	60% weightage (30% external and 30 % internal)

Please refer to the following documents for *guidelines on report writing and presentations*.

[https://ocw.mit.edu/courses/biological-engineering/20-109-laboratory-fundamentals-in-biological-engineering-fall-2007/assignments/sci\\_writing\\_guid.pdf](https://ocw.mit.edu/courses/biological-engineering/20-109-laboratory-fundamentals-in-biological-engineering-fall-2007/assignments/sci_writing_guid.pdf)

<http://privatweb.iitd.ac.in/~sundar/drc/MTech-Presentation-Guidelines.pdf>

## Annexure IIb

Department of Biochemical Engineering and Biotechnology  
IIT Delhi

### MTP Performance Evaluation (Semester I Academic Year 2017-18)

Name of examiner:

Signature:

#	Name of Student	Grade	Marks
1			
2			
3			
4			
5			
6			
7			
8			

#### Guidelines for awarding grades

Performance	Grade	Marks (10)
Outstanding	A	10
Excellent	A-	9
Very Good	B	8
Good	B-	7
Average	C	6

Please award appropriate grade and corresponding marks (out of 10) *based on the student's understanding of the subject area, work done, written report and presentation.*