

**Department of Biochemical Engineering and Biotechnology**  
**Minutes of DRC meeting**  
(DRC-07/2018-2019)

20<sup>th</sup> May 2019

The seventh meeting of *Departmental Research Committee* (DRC) for the academic session 2018-2019 was held on **20th May 2019** at 11.30 am in the Committee Room (I-230) of the Department.

The following members were present:

Prof T. R. Sreekrishnan (*Chairperson*)

Prof Atul Narang

Prof Saroj Mishra

Prof A. K. Srivastava

Prof Prashant Mishra

Prof D. Sundar

Prof Ritu Kulshreshtha

Prof Preeti Srivastava

Prof R. Elangovan

Prof Ashish Misra

Prof Shilpi Sharma (*Convenor*)

1. To confirm the minutes of the 6th meeting of the DRC for the session 2018-2019 held on 5th April 2019, and special DRC meeting held on 3rd May 2019.

The minutes of 6th meeting of DRC for the session 2018-2019 held on 5th March 2019, and special DRC meeting held on 3rd May 2019 were confirmed as circulated.

2. To report the matters arising from minutes of Meeting No. 06/2018-2019 and action taken.  
None

3. Synopsis of Ph.D. theses of following students:

Name of student (Entry No.)	Topic of Ph.D.
Sanjay Kumar (2014BEZ8005)	Scale up of PHB production using different bacterial strains
Lovely (2014BEZ8002)	Mass production of biodegradable copolymers from renewable resources
Sonia Gupta (2014BEZ8391)	Finding the link between metal pollution and antibiotic resistance
DivyaSinghi (2015BEZ8501)	Chromosome segregation in <i>Rhodococcuserythropolis</i> PR4

The Committee discussed and approved the synopsis submitted by Sanjay Kumar, Lovely, Sonia Gupta and Divya Singhi. The Committee also approved the panel of Examiners and authorized the Chairman to forward the same to Dean (Academics).

(Action: Theses Supervisors to send the following documents to the DRC Convener: (a) Filled-in form for Ph.D. synopsis submission & Appointment of Examiners (b) 2 hard copies of the Synopsis and (c) soft copy of the Synopsis by email)

#### 4. Plan of work of following Ph.D. students:

Name of student (Entry No.)	Topic of Ph.D.
Bijju Jacob (2016BEZ8335)	Kinetic studies on bio-ethanol production by <i>Scheffersomyces (Pichia) stipitis</i> in a chemostat.
Deepak Sharma (2016BEZ 8559)	A Mathematical Model for the Modified Trickle Filter

A request put forth by Mr Bijju Jacob to allow submission of plan of work beyond 18 months as per Institute norms was forwarded to Dean Academics.

The Plan of Work of Ph.D. students Bijju Jacob and Deepak Sharma was 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)

#### 5. Result of Paper I of Ph.D. comprehensive examination held on 10th May 2019

The following students were declared to have passed Paper I of Ph.D. comprehensive examination held on 10th May 2019:

Entry No	Name
2017BEZ8438	Navaneethan R.
2018BEZ7509	Vipul Kumar
2018BEZ7512	Yogesh Kalakoti
2018BEZ8239	Kritika Narula
2018BEZ8240	Deepchandra Joshi
2018BEZ8241	Garima
2018BEZ8436	Avijeet Singh Jaiswal

#### 6. Grades of BBD895 and BED800

On the basis of the progress reports submitted by the MS(Res) students and inputs from their respective supervisors, the Coordinator awarded a satisfactory (X) grade to the students for the semester in BBD895 and BED800 courses, and the progress reports were forwarded to the PG section.

#### 7. New projects for allotment to Ph.D. and MS(Res) students

New projects sent by faculty members were approved as per Annexure 1.

#### 8. Fellowship for doctoral student Mr Vidhu S. (2013BEZ8510)

Prof R. Elangovan's request of fellowship support to his Ph.D. student, Vidhu S. (2013BEZ8510), from his project was forwarded.

#### 9. ICMR-SRF to Ph.D. student Sonam Takkar (2013BEZ8030)

The committee noted the award of ICMR-SRF to Sonam Takkar and authorised the chairperson to forward the same to Dean Academics.

#### 10. Synopsis of MSR student Shruthi Lakshmi P. (2017BEY7505)

The Committee discussed and approved the synopsis submitted by Shruthi Lakshmi P. The Committee also approved the panel of Examiners and authorized the Chairman to forward the same to Dean (Academics).

(Action: Theses Supervisors to send the following documents to the DRC Convener: (a) Filled-in form for MS(Res) synopsis submission & Appointment of Examiners (b) 2 hard copies of the Synopsis and (c) soft copy of the Synopsis by email)

#### 11. Evaluation of MTP students (Sem II, 2018-19)

It was decided to conduct the final evaluation for MTP students in the 1<sup>st</sup> week of Sem I, 2019-2020 (between 22<sup>nd</sup> to 26<sup>th</sup> July 2019). The deadline for submission of reports was finalised as 15<sup>th</sup> July 2019.

12. To report the matters for ratification by the DRC

(a) Project proposals submitted by departmental faculty

S. No.	Project Title	Project Investigator	Funding Agency
1	Establishment of Bioinformatics and Computational Biology Centre	D. Sundar	DBT
2	Development of stimuli-responsive nanoparticles for intracellular delivery of microRNA and anti-cancer drug for metastatic breast cancer therapy	Mr. Sauraj Singh (Dr R. Kulshreshtha as mentor)	NPDF, SERB

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

(b) Request for ex-India leave by MS(Res) student Nidhi Solanki (2018BEY7508) to avail Future Research Talent Travel Award for a stay of 10 weeks at Australian National University (5.06.2019 - 19.08.2019)

The Head was requested to forward the application to Dean Academics.

13. Any other item with the permission of Chair

(a) Moderation of grades for 3 MTP students

The Committee noted that the Supervisor's grades were not taken into account for two students in the tabulation of grades circulated by the MTP Coordinator. The Committee sought these recommendations from the Supervisors and finalized the grades for all three MTP students.

(b) Grades for DTD899

The committee authorised the Ph.D. coordinator to submit the grades based on the respective Supervisors' recommendation.

The meeting ended with thanks to all members.

Shilpi Sharma  
Convenor, DRC

**Distribution**

DBEB faculty (by email)

**ANNEXURE I: List of new Ph.D. and M.S.(Res) topics**

S. No	Topic	Supervisor
<b>Topics for Ph.D.</b>		
1.	Development of metagenomic assisted AMR surveillance tool	Z Ahammad
2.	AD doctor: Development of tools to assess health of anaerobic digester (AD)	T R Sreekrishnan
3.	Recovery of selenium from wastewater for their application as slow release selenium fertilizer	R. Jain
4.	Molecular basis of asphaltene biotransformation by a microbial consortium	P. Srivastava
5.	Deciphering the role of hypoxia regulated non-coding RNAs in induction of genome instability in glioblastoma	R. Kulshreshtha
6.	Deciphering p53: microRNA network in cancer	R. Kulshreshtha
<b>Topics for both Ph.D. and M.S.(Res)</b>		
7.	Microbial biodesulfurization of crude oil in soil	P. Srivastava
8.	Designing a synthetic microbial community for biocontrol of Pathogen	S. Sharma
<b>Topics for M.S.(Res)</b>		
9.	Understanding the mechanism of elemental selenium nanoparticles interactions with extracellular polymeric substances/proteins: A combined spectroscopy and molecular modelling approach	R. Jain
10.	Computational analysis of DNA-binding and cleavage by genome editing proteins	D. Sundar
11.	NeuroD2/D6 regulated ncRNA network in glioblastoma	R. Kulshreshtha
12.	Targeting non-coding RNAs for GBM therapy	R. Kulshreshtha
13.	Production of complex oxidoreductases by <i>Cyathus bulleri</i> on solid substrates	S. Mishra
14.	Spray drying of laccase mixture from <i>Cyathus bulleri</i>	S. Mishra