



Minutes of DRC Meeting
(DRC-03/2019-2020)

15th November 2019

The third meeting of the *Departmental Research Committee (DRC)* for the academic session 2019-2020 was held on **15th November 2019** at 3.30 PM am in the Committee Room (I-230) of the Department. The meeting was attended by the following members:

Prof Atul Narang (Chairman)
Prof TR Sreekrishnan
Prof D Sundar
Prof Shilpi Sharma
Prof Ritu Kulshrestha
Prof Rohan Jain
Prof Ravikrishnan E (Convener)

1. *To confirm the minutes of the 2nd meeting of the DRC meeting for the session 2018-2019 held on 23rd October 2019.*

Minutes of the 2nd DRC meeting held on 23rd October for the session 2018-19 were confirmed without any modifications.

2. *Updates from BTP & MTP co-ordinator*

BTP: Request for extension of project report submission was rejected, as the deadline was intimated to the students well in advance. BTP co-ordinator is advised to send the detailed presentation schedule for 25th and evaluation format for grading.

Action: BTP co-ordinator

MTP: Request from Ekatmika for extension was approved. The co-ordinator can schedule the final evaluation of Ms. Ekatmika in the first week of January.

Action: MTP co-ordinator

3. *Matters related to next batch PhD selection*

PhD co-ordinator updated the DRC on the number of candidates shortlisted and mode of exam. PhD co-ordinator also presented a list of PhD projects floated by the faculty colleagues (Annexure I). PhD selection is scheduled on 29th November 2019 and all the members who have expressed interest to hire PhD students will be part of the selection committee. PhD co-ordinator is advised to send out the call letter and details of the selection procedure.

Action: PhD co-ordinator

4. *Conduct of Paper I of the comprehensive exam for PhD students*

Prof AK Srivastava and Prof Preeti Srivastava have been requested by DRC to conduct the Paper 1 comprehensive exam for the current PhD student. Exam can be conducted in the last week of December as per their convenience.

Action: Prof AK Srivastava and Prof Preeti Srivastava

5. PhD progress report collection from current DBEB PhD students

As per the institute academic calendar, all the enrolled PhD students are expected to submit a progress report in the online portal before 2nd December 2019.

Action: PhD co-ordinator

6. Request from Mr Arun Thappa for medical leave.

The request has been approved based on the supervisor's suggestion.

7. The following project proposals submitted by Departmental faculty were discussed and approved.

S. No	Project Title	Project Investigator	Funding Agency
1	Mitigating the Impacts of Manufacturing and Formulation Sites on Levels of Antimicrobial Resistance in the Natural Environment	Zia S (PI) & TR Sreekrishann (Co-PI)	DBT-NERC
2	Inducing the Crabtree effect and overcoming the carbon catabolite repression in yeasts.	Atul N	SERB-SUPRA

8. Synopsis report evaluation and finalization of the list of examiners for PhD student Sanjay Singh

The committee discussed and approved the synopsis submitted by Mr. Sanjay Singh (2013BEZ7510). The committee also approved the panel of examiners and authorized the chairperson to forward the same to Dean Academics

Action: Following documents should be sent to Dean Academics for further processing:

(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

9. Under any other items.

Proposal submitted by Prof Lucinda E Doyle was approved and forwarded.

S. No	Project Title	Project Investigator	Funding Agency
1	Electroactive India: profiling electrochemically-active microorganisms from across the subcontinent.	Prof Lucinda E Doyle	'New Faculty Seed' (NFS) Grant

Ravikrishnan Elangovan

Convener

Distribution

DBEB faculty (by email)

Annexure I

i.	Supervisor 1	Supervisor 2	PhD research topic	
1	AN		Kinetics of recombinant protein synthesis on mixtures of carbon sources in <i>Komagataella phaffi</i>	Approved
2	AM		Experimental and computational techniques for metabolic analysis and engineering of microbes	Approved
3	PM		Carbon nanodots for anticancer drug delivery and bioimaging	Approved
4	PM		Fabrication of bioactive peptide loaded multifunctional mesoporous silica nanoparticles for cancer treatment	Approved
5	ZA	Brejesh Lal, EE, IITD	Development of IoT enabled system for water quality surveillance in water bodies	Approved
3	ZA		Understanding the auto-healing capability of Ganga river (in view of the reduction efficacy of AMR burden)	Approved
7	TRS		AD doctor: Development of tools to assess health of anaerobic digester (AD)	Approved
3	PS		Molecular basis of asphaltene biotransformation by a microbial consortium	Approved
3	SS		Designing a synthetic microbial community for biocontrol of Pathogen	Approved
0	RE		Single cell imaging for rapid susceptibility assay	Approved
1	RE		Study of microRNA expression profile in exosomes derived from lung cells	Approved
2	RE		Molecular source tracking of AMR pathogens based on Whole Genome Sequencing	Approved
3	RE		Optimization of light sheet microscopy for large clinical specimen analysis	Approved
4	LED		Electroactive India: profiling electrochemically-active microorganisms from across the subcontinent	Approved

Sl.	Supervisor 1	Potential PhD research topic
16	PS	Deciphering the mechanism of regulation of the dsz operon for biodesulfurization of organosulfurs
17	LED	Eating electrons: investigating microbial cathodic extracellular electron transfer
18	LED	Extracellular electron transfer at the extremes: investigating the limits of electroactive microorganism
19	RJ	Development of siderophores immobilized magnetic material for the recovery of germanium from industrial wastewater and solid waste
20	RJ	Identification and production of siderophores that can selectively and sensitively bind to rare earth elements
21	RJ	Understanding the mechanism of elemental selenium nanoparticles interactions with extracellular polymeric substances/proteins

No, of students willing to take

Sl.	Faculty	No. of project floated	No. of student willing to take
1	AN	1	1
2	AM	1	1
3	PM	2	2
4	ZA	2	2
5	TRS	1	1
6	PS	2	2
7	SS	1	1
8	RE	4	4
9	LED	3	3
10	RJ	3	3
	Total	20	20