

Department of Biochemical Engineering and Biotechnology

Minutes of DRC meeting

(DRC-5/2020-2021)

Dated: 17th Feb 2021

The fifth meeting of the Departmental *Research Committee* (DRC) for the academic session 2020-2021 was held on 15 February 2021 at 11 am by video conferencing.

The following members were present

Prof. Shilpi Sharma (Chairperson)
Prof. T. R. Sreekrishnan
Prof. D. Sundar
Prof. Ritu Kulshrestha
Prof. Preeti Srivastava
Prof. Rohan Jain
Prof. Ishaan Gupta (Convenor)

1. To confirm the minutes of the 4th meeting of the DRC for the session 2020-2021 held on 6th Jan 2021.

The minutes were confirmed as circulated except the following:

Agenda item 13 – Arif Nissar Zargar's (2016BEZ7504) fellowship may be read as Institute fellowship.

2. To report the matters arising from minutes of Meeting No. 04/2020-2021

The MSR Coordinator was requested to follow up on the decision taken in 4th DRC meeting, 2020-21 about the plan of work presentation for MSR students to be conducted within one year of joining the programme.

3. Allotment of topics to Ph.D. students, Entry Sem 2, 2020-21

PhD students of Entry Sem II, 2020-2021 were allotted topics as following:

Name of student	Ph.D. Topic	Supervisor
Ms. Anuj Kumari 2020BEZ8633	Investigating the regulatory network of the key genes and non-coding RNA in glioblastoma	Prof. R. Kulshreshtha
Ms. Deeksha Jain 2020BEZ8634	Deciphering the mechanism of regulation of the dsz operon for biodesulfurization of organosulfurs	Prof. P. Srivastava

4. Constitution of SRC for Ph.D. students, Entry Sem 2, 2020-21

SRC for Ph.D. students, Entry Sem I, 2020 21 was constituted as per Annexure 1.

5. Plan of work of Ph.D. student Mr. N. Seyad Shefrin, 2018BEZ8440

The dates of Paper II of written comprehensive examination (21st Jan 2021) and Oral comprehensive examination (1st Feb 2021) of the student was recorded, and Plan of Work approved based on recommendations by the members of SRC.

6. Nomination for PMRF

The sub-committee comprising of Prof Ritu Kulshrestha and Prof Rohan Jain (constituted in 10th DRC, 2019-2020) and the DRC Chair screened the four applications received for "lateral entry" mode of nomination for PMRF. The students were asked to present their proposals in front of DRC members on 12th Feb 2020 (3 pm onwards) by online mode. Based on the presentation of project proposal, list of publications, CGPA at IITD, and qualification of National level examination, the nomination of the following students were recommended:

- Aastha Singh (2019BEZ8182): Role of "mito-miRs" in regulating hybrid EMT phenotype and invasion in breast cancer*
- Rewati Dixit (2019BEZ8187): Recovery of selenium from wastewater for its application as slow-release fertilizer*

(Action: DRC Chairperson to forward the nomination to Dean Academics)

7. SRC constitution and meetings of MSR students, Entry Sem 1, 2019-2020
In view of the Institute ordinance stating a requirement of 4 membered SRC for MSR students, an additional expert was added in the SRCs (2nd DRC meeting 2019-2020) constituted for MSR students of Entry Sem I, 2019-2020, as per Annexure 2.

8. To report the matters for ratification by the DRC.

a. Project proposals submitted by departmental faculty

S.No.	Project Name	Investigators	Funding Agency
1	Marine cell penetrating peptide conjugated anti-miRNA delivery strategy for Triple Negative Breast Cancer	Dr. Archana Chugh (co-PI Prof. Ritu Kulshreshtha)	SERB
2	Deciphering the mechanism of regulation of dsz operon for biodesulfurization of organosulfurs	Prof. Preeti Srivastava	SERB
3	Development of a Switchable Electrogenic and Electrotrophic Biofilm for Rapid Onsite Biosensing	Dr. Kartik Aiyer (I-PDF) (Mentor/Host: Lucinda Elizabeth Doyle)	Branco-Weiss
4	A mechanistic understanding of bacterial adhesion on fabrics	Prof. Shilpi Sharma, & Prof K. Vengadesan	MFIRP: IITD-RCB

		(RCB): Co-PI: Prof P. Srivastava	
5	Development of RNA G-quadruplex (RG4) topology specific ligands for selective induction/ suppression of microRNA biogenesis and function for treatment of glioma	Prof. Ritu Kulshreshtha, & Dr. Ambadas Rode (RCB)	MFIRP: IITD-RCB
6	Metabolic engineering of phenylpropanoid pathway in Arabidopsis thaliana	Dr. Prashant Mohan Pawar(RCB), Prof. Ashish Misra (Co-PI)	MFIRP: IITD-RCB
7	Identification of the novel antifungal drug targets using CRISPR-based genome engineering and screening in emerging human fungal pathogen Candida auris	Prof. Ishaan Gupta, Dr. Anil Thakur (RCB)	MFIRP: IITD-RCB
8	Development of systematic methods for overcoming catabolite repression in microbes	Prof. Atul Narang (PI), Prof. Preeti Srivastava (Co-PI)	SERB

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


- b. Application for extended financial support by Rabab Anjum, 2015BEZ8352, for a period of 6-months on account of disruption in work due to Covid-19.

Request by PhD student Ms Rabab Anjum for extension of financial support for the period 1st Jan 2021 to 30th June 2021 was forwarded by the DRC Chairperson , and the item was ratified.

9. Any other item with the permission of Chair

- It was decided to conduct Paper I of comprehensive examination for 2019 Entry Ph.D. students on 15th March 2021. Prof. Z. Ahammad and Prof I. Gupta was requested to coordinate the question paper and conduct the exam.

The meeting ended with thanks to all members.


Ishaan Gupta
Convenor, DRC

Distribution: DBEB faculty (by email)

SRC composition of Ph.D. students, Sem II, 2020-21

Name	Supervisor	Chairperson	Internal Expert	External Expert
Ms. Anuj Kumari 2020BEZ8633	Prof. R. Kulshreshtha	Prof. P. Srivastava	Prof. I. Gupta	Prof. Vivekanand Perumal, KSBS
Ms. Deeksha Jain 2020BEZ8634	Prof. P. Srivastava	Prof. I. Gupta	Prof. R. Kulshreshtha	Prof. Ashok Patel, KSBS

Revised SRC composition of MSR students, Sem I, 2019-20

Name	Entry No.	Supervisor	Chairperson	Expert-1	Expert-2
Mr. M. Apurv	2019BEY7511	Prof. Atul Narang	Prof. TR Sreekrishnan	Prof. Ashish Misra	Prof. Preeti Srivastava
Mr. Rajat Anand	2019BEY7512	Prof. Ritu Kulshrestha	Prof. Prashant Mishra	Prof. Preeti Srivastava	Prof. D SUNDAR
Mr. Sharad J.S.	2019BEY7513	Prof. Ashish Misra & Prof. D Sundar	Prof. Ravikrishnan elangovan	Ashok Patel, KSBS	Prof. Ishaan Gupta
Mr. Shravya Velamala	2019BEY7514	Prof. Ritu Kulshrestha	Prof. D Sundar	Prof. Preeti Srivastava	V.Perumal, KSBS
Mr. Sourabh Gangraram ChavAtul Narang	2019BEY7515	Prof. Preeti Srivastava	Prof. Rohan Jain	Prof. Shilpi Sharma	Prof. Ritu Kulshrestha