

**Department of Biochemical Engineering and Biotechnology**  
**Departmental Research Committee Minutes**  
(DRC-3/2022-2023)

12 Jan 2023

The third meeting of the Departmental Research Committee for the academic session 2022-2023 was held on 10th Jan 2023 in the DBEB Committee Room at 4 pm.

**The following members were present:**

Prof. Prashant Mishra (Chairperson)  
Prof. Ritu Kulshreshtha  
Prof. Shilpi Sharma  
Prof. K.J. Mukherjee  
Prof. Preeti Srivastava  
Prof. Ravikrishnan Elangovan  
Prof. Kumari Priti Sinha  
Prof. Lucinda Elizabeth Doyle (Convenor)

1. Confirmation of the minutes of the 2nd meeting of the DRC for the session 2022-23 held on 11th Nov 2022.  
[The minutes were confirmed as circulated.](#)
2. Matters arising from the minutes of Meeting No. 2/2022-23.

[Item No. 4: It was decided to constitute the SRCs for the remaining students who have joined in 2022-23 \(Semester 1 and 2\) \(Action: All Ph.D. Supervisors\)](#)

PMRF nominations

[\(i\) The application of Argha Sinha for PMRF \(direct entry\) was reviewed and recommended by the DRC. The DRC Chairperson was authorized to forward his nomination..](#)

[\(ii\) A presentation was delivered by Triveni Shelke \(2022BEZ8352\) for PMRF \(lateral entry\). It was decided that Ms Triveni will submit a revised plan of work incorporating all the suggestions in consultation with her supervisor and the Committee has authorised the DRC Chairperson to recommend and forward her nomination.](#)

Synopsis of students: Shivani Khatri (2017BEZ8287)

[The Committee discussed and, based on the recommendation of SRC, approved the synopsis of the PhD thesis with the revised title "Understanding the role of soil microbiota in](#)

disease suppression under different farming practices" submitted by Shivani Khatri (2017BEZ8287). The Committee also approved the panel of Examiners and authorized the Chairperson to forward the same to the Dean (Academics).

3. Constitution of new SRCs.

Name/Entry No	Chairperson	External expert	Internal expert	Supervisor
Kshitij Kathait 2022BEZ8358	Prof. Ritu Kulshreshtha	Prof. Pravin Ingole (Chemistry)	Prof. Kumari Priti Sinha	Prof. Lucinda Doyle & Prof. Rahul Mishra (CARE)
Shriya Grover 2022BEZ8359	Prof. Preeti Srivastava	Prof. Jayati Sarkar (ChemE)	Prof. Ishaan Gupta	Prof. Lucinda Doyle

The Committee approved the constitution of the SRCs detailed above.

4. Request for fresh panel of foreign experts for Dhvani Sandip Vora (2017BEZ8293).  
As the original list had been exhausted, the Committee approved the revised list of foreign experts supplied by the supervisor, Prof. D. Sundar, and authorized the Chairperson to forward the same to Dean (Academics).

5. Approval of Plan of Work for PhD students

Plan of work of Soumya Sahai Saxena (2021BEZ8009) for the thesis entitled "Engineering rhizospheric microbiota through compost amendment for enhanced suppressiveness against pathogens" was approved based on recommendation by the student's SRC.

6. Student requests

- a. Request of Partha Pratim Mondal (2018BEZ8438) for Ex-India leave and to avail of RSTA award to attend 11th International Conference on Multiphase Flow 2023 in Kobe Japan from 30/03/2023-12/04/23.  
The matter was discussed and the Committee approved the request.
- b. Request of Qazi Noorul Mateen (2020BEY7605) for Ex-India leave to attend a student training programme at Brigham and Women's Hospital, Harvard Medical School from Jan-Apr 2023, in addition to a 2 month extension for thesis defence upon return.

The matter was discussed and the Committee decided that before a decision can be taken regarding Ex-India leave approval, the specific dates of the visit and more details of the work involved need to be provided by the student. The Committee also advised that he should submit his thesis as soon as possible and any extension for the date of submission of thesis requires SRC recommendation.

- c. Request of Yashul Bhardwaj (2022BEZ8513) to avail of Institute Assistantship due to not being able to avail of ICAR fellowship at IIT Delhi.  
The matter was discussed and the Committee approved the request based on his eligibility for Institute fellowship at the time of admission.
  - d. Request of Jyoti Sharma (2015BEZ8503) for extension of registration up to Feb 28, 2023 to submit PhD thesis.  
The matter was discussed and the Committee approved the request.
  - e. Request of Ratnabali Ghosh (2021BEZ8008) for semester withdrawal  
Based on the medical application submitted by Ratnabali Ghosh on 8 Oct 2022 for semester withdrawal for Semester 1 2022-23, the Committee approved the request.
  - f. Request of Priyanka Dubey (2017BEZ8285) to approve attendance of online conference “Sustainable Minerals” from 21-24 June 2021.  
The matter was discussed and the Committee approved the request.
  - g. Request of Soumya Rajpal (2017BEZ8291) to approve attendance of online conference “Biosensors-2020” from 27-29 July 2021.  
The matter was discussed and the Committee approved the request of Soumya Rajpal for attending an online conference on revised dates as above.
7. Matters for ratification
- a. Request of Prof. Ravikrishanan Elangovan to provide SRF fellowship for PhD student Arti Tyagi for last 6 months and PhD student Sneha Kumar for last 3 months.  
The matters were discussed and the Committee approved the requests.
  - b. Project proposals submitted by faculty members.

S. No.	Project Name	Investigator	Funding Agency
1.	Development of a novel therapeutic regime against multidrug-resistant <i>Candida auris</i>	Prof. Ishaan Gupta (PI) Anil Thakur (RCB) (co-PI)	MFIRP-IITD-RCB Call
2.	Regulation of miRNA expression and maturation via targeting G-quadruplex	Prof. Ritu Kulshreshtha (PI) Dr. Ambadas Rode	MFIRP-IITD-RCB Call

	conformations using small molecules for glioma therapy	(co-PI)	
3.	Development and validation of a lab on a chip integrated DNA Extraction and LAMP based detection of high-risk HPV genotypes	Prof. Ravikrishnan Elangovan (PI) Dr Saritha Shamsunder, Safdarjung Hospital Dr Showket NICPR Dr B. Ganesh ICMR NIE (co-PIs)	ICMR
4.	Molecularly Imprinted Polymers with Tailor Made Binding Cavities for Antibiotic Stewardship and Sustainable Developmental Goals	Prof. Prashant Mishra Prof. Karsten Haupt, Université de Technologie de Compiègne	IFCPAR/CEFIPRA (Indo-French)
5.	AYUCENTRE (AYUrveda CENtered Translational Research and Education)	Prof. D. Sundar	Ministry of Ayush
6.	Conversion of lignocellulosic plant biomass to renewables through plant and microbial metabolic engineering	Prof. Ashish Misra Prashant Mohan Pawar, RCB	MFIRP-IITD-RCB Call
7.	“Test and Treat”: Performance benchmarking of an automated CtDNA isolation platform to make therapeutic decisions and monitor disease progression in NSCLC	Prof. Ravikrishnan Elangovan (PI) Dr Prabhat, Dr Sachin and Dr Deepali	ICMR
8.	Harnessing the potential of soil microbiome by developing a method for its storage to preserve its functionality for future application	Dr. Annapurna Bhattacharjee (applicant) Prof. Shilpi Sharma (mentor)	DBT: BioCare
9.	Soil Digital Health Card (SoDigHard): A fusion of soil analysis and hyperspectral remote sensing with deep learning/AI-based approach	Prof. Shilpi Sharma (PI) Prof. Brejesh Lall (co-PI)	DBT

	for large-scale implementation in India		
10.	Diagnostic Innovations for Scalable Healthcare Applications (DISHA)	Prof. Prof. Ravikrishnan Elangovan (PI) Prof. Vivekanandan Perumal (co-PI)	DBT
11.	Regulation of miRNA expression and maturation via targeting G-quadruplex conformations using small molecules for glioma therapy	Prof. Ritu Kulshreshtha (PI) Dr. Paras Prasad (UB), Dr. Ravikumar Aalinkeel (UB) (co-PIs)	IITD

The above projects were circulated to members. As no comments were received, the projects were forwarded to the concerned authorities, and the item was ratified.

10. Any other matters, with permission of the Chair.

A request was received from Pallavi Gupta (2021QIZ8228), who is part of the UQ-IITD programme but hosted at DBEB, to avail of PMRF contingency to attend a lecture course on “Modeling development and disease with human tissue organoids”, Institute for Stem Cell Science and Regenerative Medicine, Bengaluru from 6-9 February 2023. The Committee approved the request and advised the necessary approvals be taken from the UQ-IITD/PMRF office.

A request was received by Triveni Shelke (2022BEZ8352) to utilise contingency to attend the “Second Preparatory School on Population Genetics and Evolution” workshop, ICTS, Bengaluru from 20-24 Feb 2023. The Committee approved the request.

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



Lucinda E. Doyle  
DRC Convenor