

Department of Biochemical Engineering and Biotechnology

**Minutes of the meeting of
Departmental Research Committee (DRC)
(DRC-04/2016-2017)**

January 03, 2017

The fourth meeting of the *Departmental Research Committee* (DRC) for the academic session 2016-2017 was held on **Monday, January 02, 2017** at **3 PM** in the Committee Room (I-230) of the Department.

The following members were present:

Prof. T.R. Sreekrishnan (*Chairman*)
Prof. Atul Narang
Prof. Saroj Mishra
Prof. A.K. Srivastava
Prof. Prashant Mishra
Dr. Shilpi Sharma
Dr. Preeti Srivastava
Dr. Ravikrishnan Elangovan
Dr. Ziauddin Shaikh Ahammad
Dr. Ashish Misra
Dr. D. Sundar (*Convener*)

Item No. 1 - To confirm the minutes of the 3rd meeting of the DRC for the session 2016-2017 (DRC-03/2016-2017) held on December 01, 2016.

The Minutes of the DRC meeting No. 03/2016-2017 were confirmed as circulated.

Item No. 2 - Matters arising out of the minutes of DRC-03/2016-2017.

None

Item No. 3 – Allotment of M.Tech Major Project (MTP) for the following dual degree students

Sl.	Entry Number	Student
1	2012BB50007	Anant Preet
2	2012BB50010	Ankit Dutt
3	2012BB50041	Nikhil Kanojia
4	2012BB50045	Avijeet Singh Jaswal

The Committee noted that only one student Mr. Avijeet Singh Jaswal had registered for the MTP course BED851 as on date and it was decided that Mr. Jaswal would pursue his M.Tech Major Project under the mentorship of Prof. Saroj Mishra. It was further recommended that all other faculty members should come forward to float new MTP projects for allotment to the remaining students. The Committee was of the opinion that the other three students, who may register for the MTP course in the future, could also be asked to discuss their research interests with the faculty members, so that the concerned faculty could float related MTP projects.

Item No. 4 – Report on Comprehensive Examination and Approval of Research Plan of the PhD student Ms. Upma Singh (2015BEZ8004).

The Plan of Work for PhD submitted by Ms. Upma Singh was discussed, and based on the recommendation of the SRC, it was approved.

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

Item No. 5 – Scheduling the written PhD Comprehensive Exam in January 2017.

It was decided to conduct the Ph.D Written Comprehensive Examination on January 25 and 27, 2017 for Paper 1 and Paper 2 respectively. Prof. A.K. Srivastava and Dr. Preeti Srivastava will coordinate the setting of question papers and conduct the examination.

Item No. 6 – Allotment of Projects to 2016 Dec-entry PhD students.

The schedule for allotment of projects for 2016 Dec-entry PhD students was finalized as given below:

Sl.	Date	Activity
1	Jan 03, 2017	DRC convener to (a) seek new projects from faculty (b) take consent of faculty for floating their already approved projects
2	Jan 09, 2017	Last date for faculty to respond on projects to be floated
3	< Jan 13, 2017	DRC convener to have the new projects approved by email circulation
2	Jan 15, 2017	List of PhD projects to be made available to students
3	Jan 30, 2017	Students to submit their three choices of projects after consultation with faculty members
4	Feb 2017 first week	Allotment of projects to be taken up in the next DRC

The list of available PhD projects approved by DRC as on date is given in **Annexure 1**. The Committee decided that projects of those faculty members who are already mentoring 6 PhD students (either sole or joint guidance) would not be floated this time.

Item No. 7 – To report the matters for ratification by the DRC.

The Committee ratified the approval accorded by the Chairman (DRC) or Head of the Department for the following project proposals submitted by the faculty:

Sl.	Project Title	Project Investigators	Funding Agency
1	Rhizosphere engineering by identification of core microbiome	Shilpi Sharma	DBT (Innovative Young Biotechnologist Award – IYBA)
2	Development of an efficient biocatalyst for the production of fumaric acid	Ashish Misra	
3	Gaining insights into the mechanism of chromosome segregation in <i>Rhodococcus erythropolis</i> PR4	Preeti Srivastava	DST
4	An alliance against anti-microbial resistance (Partnering Institutions – IIT Delhi, THSTI, NIBMG, CMC Vellore, MAMC Delhi, SSKM Kolkata, Jamia Hamdard Univ, JIPMER)	Co-PIs – Ravi Elangovan, D. Sundar, Subrat Kar PI – Vivek Perumal (KSBS)	DBT (Glue Grant Scheme)

Item No. 8 - Any other item with the permission of the Chair.

a) Constitution of SRC for 2016 July-entry PhD and MSR students.

The Committee discussed and constituted the SRC as given in **Annexure - 2**.

b) A note received from Prof. Saroj Mishra for constitution of SRC of MSR student Ms. Aakansha Gautam (2014BEY7501).

The Committee discussed and constituted the SRC for Ms. Aakansha Gautam for the thesis entitled 'Synthesis of lower chain alkylbeta glucosides using whole cells of *Microbacterium paraoxydans*' as given in **Annexure - 2**.

c) A note received from PhD Student Mr. Sunil Kumar (2011BEZ8480) for extension of Institute Assistantship beyond 4 years.

The Committee discussed and recommended the application received from Mr. Sunil Kumar (2011BEZ8480) to be forwarded to Dean (Academics).


(Action: Chairman DRC to forward the letter to Dean - Academics)

d) Application for Ex-India Leave received from PhD student Ms. Manisha Lamba (2013BEZ7506).

The Committee approved the request for Ex-India Leave to Ms. Manish Lamba for advanced training at Newcastle University, UK during Jan 17-31, 2017.

(Action: Chairman DRC to forward the letter to Dean - Academics)

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


D. SUNDAR
DRC Convener

Distribution

All DRC members and other DBEB Faculty (by email)

Cc: DRC File

Updated list of PhD projects approved by DRC and available for allotment in the future

(as on Jan 02, 2017)

Sl.	Supervisor 1	Supervisor 2	Potential PhD research topic
1	GPA	AM	Protein transmission investigations through ultrafiltration for moderately high-pressure range (> 100 Kpa)
2	GPA	AN	Mixed sugars fermentation for alcohol production with the help of nanofiltration
3	GPA	PM	Production and purification of lipase using MF and UF membrane
4	GPA	PS	Succinic acid production and its separation via nanofiltration
5	AKS *		Mass production of bio/copolymer using <i>Azohydromonas australica</i> and <i>A. eutropha</i> in novel reactor configurations.
6	AKS *		Production of biopolymers (PHB and its derivatives) from sulfite waste water
7	AKS *		Scale up of continuous cultivation with cell retention for mass production of bio-pesticide (Azadiractin) by plant cell cultures
8	PM		Engineering of Lipase for their application in reigo and stereoselectivity
9	SN	RE	Measurement of oxygen exchange by mass spectrometry for probing the mechanism of ATP synthesis by ATP synthase: A splendid molecular machine
10	SN	RE	Probing the mechanism of ATP synthesis
11	AN		Production of platform chemical 6-pentyl- α -pyrone (6PP) by <i>Trichoderma atroviride</i>
12	DS		Computational genome analysis
13	DS	Renu Wadhwa, AIST, Japan	Bioinformatics insights to the manipulation of hypoxia signalling for cancer metastasis treatment by natural products
14	SS		Non-dairy probiotics for Indian market
15	SS	SC	Biotic and abiotic factors affecting healthy Indian adult microflora
16	PS		Engineering of Dibenzothiophene monooxygenase (DszC) for enhanced substrate range and improved activity
17	PS		Regulation of dsz operon
18	RE		Visualizing processive molecular motors using single molecular fluorescence techniques
19	ZAS	TRS	Mitigating the risk of heavy metals and emerging contaminants in the environment

* will not be available for allotment to 2016 Dec-entry students

Student's Research Committee (SRC) for PhD Students

Student	Chairman, DRC or his nominee	One expert in the field from the Department	One Institute faculty expert, preferably in the concerned area, from outside the Department to which the student belongs	Supervisor(s)
Anirban Jana (2016BEZ8004)	D. Sundar	Preeti Srivastava	Vivekanandan Perumal (KSBS, IITD)	Ritu Kulshreshtha
Priyanka (2016BEZ8005)	Ritu Kulshreshtha	Preeti Srivastava	Satyawati Sharma (CRDT, IITD)	Shilpi Sharma
Ritu Bhardwaj (2016BEZ8007)	Saroj Mishra	Preeti Srivastava	Biswajit Kundu (KSBS, IITD)	Prashant Mishra
Ngangom Pravina Devi (2016BEZ8008)	A.K. Srivastava	Atul Narang	M.Ali Haider (Chemical Engineering, IITD)	Ashish Misra
Navojdit Kumar Singh (2016BEZ8009)	TR Sreekrishnan	Ziauddin Ahammad	K.K. Pant (Chemical Engineering, IITD)	AK Srivastava

(Action: Respective Supervisors to send the filled-in form to Chairman DRC for forwarding to Dean Academics)

Student's Research Committee (SRC) for MSR Students

Student	Chairman, DRC or his nominee	One expert in the field from the Department	Supervisor(s)
Nakul Aggarwal (2016BEY7502)	A.K. Srivastava	T.R. Sreekrishnan	Ziauddin Ahammad
Nitika (2016BEY7503)	Ashish Misra	Ziauddin Ahammad	Atul Narang
Arif Nissar Zargar (2016BEY7504)	VS Bisaria	Saroj Mishra	Preeti Srivastava & Manoj Upreti (IOCL)
Anirban Kundu (2016BEY7505)	TR Sreekrishnan	Atul Narang	PK Roychoudhury & Ziauddin Ahammad
Vasu Goel (2016BEY7506)	VS Bisaria	Preeti Srivastava	Shilpi Sharma
Nidhi Yadav (2016BEY7507)	Saroj Mishra	D. Sundar	Shilpi Sharma
Aakansha Gautam (2014BEY7501)	Prashant Mishra	Preeti Srivastava	Saroj Mishra