

**Department of Biochemical Engineering and Biotechnology**  
**DRC MEETING NOTICE**  
(DRC-06/2014-2015)

July 15<sup>th</sup>, 2015

The sixth meeting of *Departmental Research Committee* (DRC) for the academic session 2014-2015 was held on **Friday, July 10<sup>th</sup>, 2015** at **11:30 AM** in the Committee Room (I-230) of the Department.

The following members were present:

Prof. Prashant Mishra (*Chairman*)

Prof. Saroj Mishra

Prof. A. K. Srivastava

Prof. Atul Narang

Dr. Shilpi Sharma

Dr. Ritu Kulshreshtha

**Item No 1.** To confirm the minutes of the 5<sup>th</sup> meeting of the DRC for the session 2014-2015 (DRC-05/2014-2015) held on April 24, 2015.

The Minutes of the DRC meeting No. 5/2014-2015 were confirmed as circulated

**Item No 2.** To report the matters arising from minutes of Meeting No. 05/2014-2015 and action taken.

Item # in DRC Meeting No. 05/2014-2015	Brief description	Gist of the decision of the DRC	Action taken / Present status
3	Comprehensive Examination and Research Plan of the PhD student Ms. Manisha Lamba and Jaspreet K Dhanjal	Approved	Forwarded to Dean Academics
4	Application from PhD student Ms. Anamika Singh (2011BEZ8228) for extension of Scholarship	Recommended	Forwarded to Dean Academics
6	Formation of Student's Research Committee (SRC) for PhD students: Pooja Murarka, Vidhi Malik	Constituted	
7	Formation of Student's Research Committee (SRC) for MSR student, Pravita Singh	Constituted	
8	Consideration of project proposals submitted by the Departmental Faculty	Recommended	Forwarded to IRD
10	Admissions for the PhD and MSR Programs	Schedule was finalised, Committee for screening test was	Screening test and interviews were conducted on 14th and

		formed	15th May 2015
15a	Project proposal submitted by Prof Saroj Mishra	Recommended	Forwarded to IRD
15d	Discussion on M.Tech projects floated by Departmental Faculty.	Projects approved for floating	Projects assigned to final year students

**Item No 3.** Application received from Mr Sunil Kumar (2011BEZ8480) requesting for extension of Institute Assistantship starting July 01, 2015.

The request for extension of Institute Assistantship starting 1st July 2015 was approved as the total duration of fellowship availed by Mr Sunil Kumar till date is for a period of 3 years 2 months (2 yrs 8 months as CSIR-SRF and 6 months Institute assistantship).

**Item No 4.** Application received from Mr S. Premnath (2010BEZ8764) requesting for extension of Institute Assistantship starting July 01, 2015.

The request for extension of Institute Assistantship starting 1st July 2015 was approved for one semester starting July 2015.

**Item No 5.** Request for conversion of MSR registration to PhD programme, received from MSR student, Mr Ashish Lohar (2014BEY7503).

Request for conversion of MSR registration to PhD programme by Mr Ashish Lohar was discussed and Committee approved the conversion of registration as he fulfilled the criteria.

**Item No 6.** Formation of Student's Research Committee (SRC) for the following PhD and MSR students:

S. No	Student	Entry Number	Supervisor
1	Raju Kumar	2014BEZ8266	AKS
2	Garima Goyal	2014BEY7504	PM

The Committee discussed and constituted the SRC for Mr Raju Kumar (2014BEZ8266) and Ms. Garima Goyal (2014BEY7504) as given in Annexure 1.

**Item No 7.** Synopsis of the MSR thesis submitted by the following students:

S. No	Student	Entry	Title	Supervisor
1	Kavita Sharma	2013BEY7504	Polyhydroxybutyrate production using glycerol	AKS & TRS
2	Peeyush Kumar	2013BEY7508	Effect of <i>Piriformospora indica</i> on production of bioactive compounds from cell cultures of <i>Tinospora cordifolia</i> and <i>Lantana camara</i>	VSB & DS
3	Gaurav Sinsinbar	2013BEY7503	Patterning of magnetic nanoparticles using recombinant S-layer protein	PM

4	Kunal Gupta	2013BEY7505	Biodiesel purification using ultrafiltration membranes	GPA
5	Deepak Tewari	2013BEY7502	Fractionation of simulated lignocellulosic hydrolysate via Nanofiltration	GPA

Based on the recommendations of the SRC, the Committee discussed and approved the synopsis submitted by Ms. Kavita Sharma, Mr Peeyush Kumar, Mr Gaurav Sinsinbar, Mr Kunal Gupta and Mr Deepak Tiwari. The Committee also approved the panel of Examiners for the thesis and authorized the Chairman to forward the same to Dean (Academics).

(Action: 1. Supervisor to send the following documents to the DRC Convener-

(a) Filled-in form for PhD synopsis submission & Appointment of Examiners, (b) 2 hard copies of the Synopsis and (c) soft copy of the Synopsis on CD and by email

(Action 2: Upon receipt of the above documents, Chairman DRC to forward it to Dean -Academics)

**Item No 8.** Application received from MSR student, Ms Ankita (2014BEY7502), for summer internship in Germany.

Request by Ms Ankita was discussed and since the work to be carried out by her is part of her MS (R) program, Committee approved her application for summer internship for the period 1.8.15 to 1.10.15.

**Item No 9.** Correction/modification for QIP-Admission Information brochure for admission in M.Tech and Ph.D under QIP for the year 2016-2017

Committee after discussion modified the content for QIP-Admission Information Brochure as per annexure 2. Chairperson was requested to forward the same to Coordinator QIP.

(Act: Chairperson)

**Item No 10.** Application received from Ms Ria Banerjee (2014BEZ8004) for change of topic of PhD thesis

In view of the application received from Ms Ria Banerjee for the change of Ph.D topic second time (where earlier request for change of Ph.D.topic was accepted), and subsequent application for semester break by Ms Banerjee (Agenda Item 11), the committee decided to consider such a request once Ms Banerjee rejoins after the semester break and finalizes specific topic in consultation with her supervisors.

**Item No 11.** Application received from Ms Ria Banerjee (2014BEZ8004) requesting a break for one semester

Committee approved the request for a semester break by Ms Ria Banerjee on medical grounds. Chairperson was requested to forward the application to Dean Academics.

(Act: Chairperson)

**Item No 12.** Consideration of project proposals submitted by the Departmental Faculty, for funding from national agencies:

S. No	Project Title	Project Investigators	Funding agency
1	Response of gut microbiota to biotic and abiotic factors in simulated environment	Shilpi Sharma (PI), Subhash Chand (Co-PI)	MFPI-DST
2	Diversity of ACC deaminase producers in the rhizosphere of <i>Cajanus cajan</i> in stressed agricultural environments	Shilpi Sharma	DST

The Committee discussed and recommended the above proposals to be forwarded to Dean (R&D) for onward transmission to the funding agency.

(Action: Shilpi Sharma)

**Item No 13.** Application received from Mr Mayank Bharadwaj for MTP allotment

The application received from Mr Mayank Bharadwaj was duly considered by the committee and he was allotted the topic "Treatment of coke oven effluent using microbial fuel cell" under the mentorship of Dr Z. A. Ahammad as his M.Tech project.

**Item No 14.** Application received from an Ethiopian Government Sponsored student Mr Eyob Chukalo Chutulo, under self financing scheme.

Mr Eyob Chukalo Chutulo was interviewed by the committee over Skype. Based on his performance he was not considered suitable for the Ph.D programme.

**Item No 15.** Report on Comprehensive Examination and Approval of Research Plan of Mr Vidhu S. (2013BEZ8510)

The Plan of Work for Ph.D. submitted by Mr Vidhu S. 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 16.** Application received from Ms Aakansha Gautam (2014BEY7501), MSR student, requesting a deferral of her work plan presentation to 1st week of Aug 2015.

The Committee discussed and agreed to her request

**Item No 17.** Progress report of PhD students for grading DTD899:

Based on the recommendation of Supervisor(s)/ SRC the grades were discussed and the Chairman was authorized to forward to Dean (Academics). (Act: Chairperson)

**Item No 18.** Any other item

(i) Advance admission to PhD programme

Chairperson informed the committee of Mr Biju Jacob's selection for Advance admission to PhD Degree programme 2015-2016 of the department.

(ii) Resignation of Mr Himanshu Singh

Chairperson apprised the committee of the acceptance of departmental research scholar, Mr Himanshu Singh's (2012BEZ8189) resignation by Deputy Registrar (PGS&R) w.e.f. 30.6.2015.

(iii) Resignation of Ms Apoorva Verma

Chairperson apprised the committee of the acceptance of departmental research scholar, of Ms Apoorva Verma's (2013BEZ8023) resignation by Deputy Registrar (PGS&R) w.e.f. 09.7.2015.

(iv) Application received from Mr Anees Kaprakkaden (2012BEZ8192) for conversion of his PhD registration from full time to part time

In view of the requisite facilities being available in Mr Anees Kaprakkaden's parent institution, ICAR-IINRG Ranchi), the committee approved his application for conversion of his PhD registration from full time to part time

(v) Application received from Mr Kapil B. Rananaware regarding his MTP defense to be scheduled for July 2015

Committee discussed the application received from Mr Kapil B. Rananaware regarding scheduling of his MTP defense in the last week of July 2015. In view of the email received from his supervisor Prof Atul Narang stating Kapil's absence from the department during the semester, and from the mid term evaluation held in the semester, the committee rejected his application and advised him to discuss his progress of work with his adviser.

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

Shilpi Sharma  
(Member, officiating Convenor)

**Distribution**

All DRC members and other DBEB faculty (by email)

Cc: DRC File

**Student's Research Committee (SRC) for PhD student**

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
Raju Kumar 2014BEZ8266	Prof A. Narang	Prof T R Sreekrishnan	Prof K K Pant	Prof A K Srivastava

**Student's Research Committee (SRC) for M.S.(R) students**

Student	Chairman, DRC or his nominee	One expert in the field from the department	Another faculty expert	Supervisor
Garima Goyal 2014BEY7504	Prof S. Mishra	Dr P. Srivastava	Prof S K Khare	Prof P Mishra
Gaurav Malik 2014BEY7505	Dr D. Sundar	Dr R. Kulshreshtha		Dr R. Elangovan
Aakansha Gautam 2014BEY7501	Prof P Mishra	Dr R. Kulshreshtha	Prof S K Khare	Prof S. Mishra

## ANNEXURE 2

Code	Department/Centre	Fields of specialisation	Minimum Qualification
DLBC01	Biochemical Engineering and Biotechnology	<p><b>Bioprocess Engineering:</b> Engineering analysis of enzymatic, cellular, metabolic processing involving bioprocess kinetics, Modelling for development of reactor operation strategies &amp; process optimization, Use of Innovative bioreactor designs, Process integration &amp; scale-up for economic production of metabolites, Monitoring and control of process parameters, Animal cell technology, Plant cell/hairy root cultivation in bioreactors for strategic metabolite production, Metabolic flux analysis, Bioenergetics, Biotransformation.</p> <p><b>Downstream Processing:</b> Novel product separation strategies based on sorption, Liquid-liquid extraction, Ultra-filtration, Affinity methods.</p> <p><b>Molecular Biology and Recombinant DNA technology:</b> Development of recombinant cultures for hyperproduction of metabolites and commercially important enzymes (<math>\beta</math> glycosidase, laccase, protease), Protein engineering, Heterologous protein production (including therapeutics in <i>Escherichia coli</i>, <i>Pichia pastoris</i>), Cancer molecular biology, microRNA research and RNA technology, Bioinformatics and Genomics.</p> <p><b>Bioremediation and Environmental Biotechnology:</b> Prospecting of microbes and their application in wastewater treatment and agriculture.</p> <p><b>Pharmaceutical Biotechnology and Industrial Biotechnology</b></p>	M.Tech. / M.S. degree in Chemical / Biochemical Engineering, Food Technology, Environmental Biotechnology, Pharmaceutical Biotechnology, Industrial Biotechnology, Applied Microbiology.