

**Department of Biochemical Engineering and Biotechnology**  
**Minutes of DRC MEETING**  
(DRC-02/2015-2016)

Dec 7th, 2015

The second meeting of *Departmental Research Committee* (DRC) for the academic session 2015-2016 was held on **Monday, Nov 23rd, 2015** at **10:00 AM** in the Committee Room (I- 230) of the Department.

The following members were present:

Prof. Prashant Mishra (*Chairman*)

Prof. V. S. Bisaria

Prof. Saroj Mishra

Prof. T. R. Sreekrishnan

Prof. A. K. Srivastava

Prof. Atul Narang

Dr. D. Sundar

Dr. Ritu Kulshreshtha

Dr. Preeti Srivastava

Dr. Shilpi Sharma (*Convenor*)

**Item No 1.** To confirm the minutes of the 1st meeting of the DRC for the session 2015-2016 (*DRC-01/2015-2016*) held on Sept 16, 2015.

The Minutes of the DRC meeting No. 1/2015-2016 were confirmed with the following modifications:

*Item No 4 (DRC-01/2015-2016)*. Modified as "...Also, the project floated by Dr R. Elangovan and Dr Z. Ahammad may kindly be submitted to IBSC for due approval."

**Item No 2.** To report the matters arising from minutes of Meeting No. 01/2015-2016 and action taken.

Item # in DRC Meeting No. 01/2015-2016	Brief description	Gist of the decision of the DRC	Action taken / Present status
3	Discussion on scheduling the written PhD Comprehensive examination in September 2015	Date finalised, committee formed	Comprehensive exam conducted on 29-30th Sept 2015
4	New projects floated by departmental faculty for PhD and MS(R) students	Approved	Final project list floated with deadline of 7.10.15. RE and ZA to put forth proposal in IBSC.
5	SRC for MTP students, Sem I, 2015-2016	Approved	Mid term evaluation conducted
6	Synopsis of Ms Swati Shalini	Approved	Forwarded to Dean Academics
9	Request by Dr. D. Sundar for inclusion of	Approved	Forwarded to Dean

	Dr Renu Wadhwa as Joint Supervisor for PhD student, Ms. Vidhi Malik		Academics
11	Discussion on evaluation of BED851-854	Evaluation criteria modified	Mid term evaluation done as per new criteria
13	Formation of Student's Research Committee (SRC) for Aditya Soni and Sonia Gupta	SRC approved	

**Item No 3.** Allotment of Ph.D. topic to students admitted in Sem I, 2015-16

Topics were allotted to Ph.D. students of Semester I, 2015-2016 entry as per Annexure 1.

**Item No 4.** Allotment of M.S.(R) topic to students admitted in Sem I, 2015-16

Topics were allotted to M.S.(R) students of Semester I, 2015-2016 entry as per Annexure 2.

**Item No 5.** Results of comprehensive examination held in September 2015

Based on the marks obtained by students in written comprehensive examination held in September 2015, doctoral students Ashish K. Lohar (2014BEZ7503), Ankur Kumar (2014BEZ8001), and Onkar S. Vinchure (2014BEZ8003), were declared to have passed the same.

**Item No 6.** Admission for Ph.D. programme (Sem II, 2015-16)

PhD coordinator, Dr Shilpi Sharma briefed the committee on the total number of applicants in various categories, and the numbers shortlisted. Based on the number of shortlisted candidates, it was decided to conduct interviews for the shortlisted candidates on 15th Dec 2015. All the departmental faculty were requested to be available on the date of interview for participation. The shortlisting criteria approved for admission to PhD program is given in Annexure 3.

**Item No 7.** Request received from Prof. A. K. Srivastava regarding removal of co-supervisor's name for Ph.D. students Jitendra Singh Verma and Sanjay Kumar

The request put forth by Prof. A. K. Srivastava was discussed. The committee decided to drop the name of Prof. T. R. Sreekrishnan as co-supervisor for only Mr Sanjay Kumar as he has not submitted his plan of work so far.

**Item No 8.** Request received from Dr. Z. Ahammad to include Prof. T. R. Sreekrishnan as co-supervisor for Ph.D. student Ms Sonia Gupta

In view of the decision taken in Item No 7, Prof. T. R. Sreekrishnan was included as a co-supervisor for Ph.D. student Ms Sonia Gupta.

**Item No 9.** Proposal entitled "Application of Cross-linked Enzyme aggregates for Enhanced Hydrolysis of Lignocellulosic Residues" submitted by Prof. V. S. Bisaria for submission to DBT.

The Committee after discussion approved the project proposal. The Committee noted that since no specific comments were received from the members on the proposal, the Chairman DRC has been authorized to forward it on IRIS for onward transmission to the funding agency.

**Item No 10.** Request received by Ph.D. student, Mr. Deepak's to audit Downstream Processing course

Based on recommendation of Course coordinator the request of Mr. Deepak Kumar to audit the above course was approved.

**Item No 11.** Request received from Ph.D. student, Sunil Kumar, for extension of assistantship beyond Dec 2015

In view of the earlier request received by Sunil Kumar last year and the decision taken in 2nd DRC, Sem 2014-15, it was decided that the request for extension will be forwarded subject to availability of Institute Assistantship post the December selection of Ph.D. students. Supervisor was, however, encouraged to look for alternate funding.

**Item No 12.** Plan of work of Ph.D. student Sanjay Singh

Based on the recommendation of the student's SRC, Sanjay Singh's plan of work was approved.

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

**Item No 13.** Progress of work of departmental doctoral students

Supervisors were requested to inform the Head of the progress of their respective PhD student for the semester, so that grades may appropriately be sent to Academic section.

**Item No 14.** Application received by foreign student for Ph.D. under Self Financing Scheme.

It was decided to interview the candidate from Iran, Ms Athareh Khosravi Noohoji, who has applied for Ph.D. under self financing scheme, by Skype. (Action: Convenor DRC to fix up the interview)

**Item No 15.** Allotment of MTP topics to students for Sem II, 2015-2016

The coordinator was requested to seek MTP topics from faculty members for allotment to students for Sem II, 2015-16. (Action: MTP Coordinator)

**Item No 16.** Comprehensive exam scheduled for Jan 2016

It was decided to conduct the Ph.D. written comprehensive examination on 21-22nd Jan 2016. Prof. A. K. Srivastava and Dr. Preeti Srivastava will coordinate the setting of question papers and conduct the examination.

**Item No 17.** Discussion on criteria for X grade to MTP students

In view of three applications received from MTP students requesting X grade the committee decided to go by the decision of their respective evaluations committees for which the students should make a presentation as per schedule in the academic calendar. It was also decided that henceforth awarding X grade will be recommended if students apply one month in advance giving reasons.

**Item No 18.** Synopsis of the PhD thesis title "Concentration and removal of arsenic using sulphate reducing bacteria (SRB)" submitted by Satyendra Singh (2009BEZ8510).

Based on the recommendations of the SRC, the Committee discussed and approved the synopsis submitted by Mr Satyendra Singh. 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 19.** Any other item with the permission of the chair

(i) Request for No Objection Certificate by Shikha Gupta

MS(R) student of the department, Shikha Gupta's application for a No Objection Certificate for application to Khorana Scholars' programme, was considered. Her supervisor, Dr Ritu Kulshreshtha,

was requested to coordinate the prospective lab for her training during the programme so that it adds value to her ongoing MS(R) programme. (Action: Supervisor Dr Ritu Kulshreshtha)

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

Shilpi Sharma  
(Convenor)

**Distribution**

All DRC members and other DBEB faculty (by email)

Cc: DRC File

**Project allotment to PhD students of 2015 Sem I Entry**

<b>Student</b>	<b>Entry No</b>	<b>Project title</b>	<b>Supervisor</b>
Deepak K Prasad	2015BEZ8001	AD Doctor - development of process monitoring strategy for operating anaerobic digesters	Dr. Z. Ahammad
Upma Singh	2015BEZ8004	Evaluation of microbial community structure and function in pesticide contaminated soil using molecular markers	Dr. S. Sharma
Biju Jacob	QIP	Genetic engineering of <i>Pichia stipitis</i> for improved ethanol production	Prof. Atul Narang

ANNEXURE 2

**Project allotment to MS(R) students of 2015 Sem I Entry**

<b>Student</b>	<b>Entry No</b>	<b>Project title</b>	<b>Supervisor</b>
Anjani Kumari	2015BEY7502	Bioinformatics insights to the manipulation of hypoxia signalling for cancer metastasis treatment by natural products	Dr D. Sundar & Dr R. Wadhwa, AIST, Japan
Asmita Pandey	2015BEY7503	Stabilization of cellulolytic enzymes and their applications	Prof. V. S. Bisaria
Gopal K Roy	2015BEY7504	To study and establish optimum recovery protocol for PHB/Copolymers	Prof. T R Sreekrishnan
Kamakshi Gupta	2015BEY7505	Continuous production of Biopolymers (PHB and its derivatives) from by-product of biodiesel industry (glycerol) using high cell density cell culture.	Prof. A. K. Srivastava
Radhika Khera	2015BEY7506	Synthesis of glycol-conjugates using engineered beta-glucosidase I of <i>Pichia etchellsii</i>	Prof. S. Mishra
Shikha Gupta	2015BEY7507	Regulatory and functional dissection of SNORD115 in glioblastoma	Dr. R. Kulshreshtha

**Short-listing criteria for Admission to Ph.D. Program in the Department**

The candidates must have first class in all examinations starting from 10+2 up to the qualifying exam and they must meet the following criteria based on their qualifying exam degree

Qualifying exam	Acceptable majors	General Category	OBC (Non-creamy layer)	SC/ST & PD
B. Tech.	Biochemical Engineering / Chemical Engineering / Biotechnology	(i) B.Tech 70% or 7.5/10 CGPA (ii) Valid JRF or GATE score of min. 600 in Life Sciences or Biotechnology or Chemical Engg.	(i) B.Tech 70% or 7.5/10 CGPA (ii) Valid JRF or GATE score of min. 550 in Life Sciences or Biotechnology or Chemical Engg.	(i) B.Tech 65% or 7.1/10 CGPA (ii) Valid JRF or GATE score of min. 500 in Life Sciences or Biotechnology or Chemical Engg.
M. Tech./ M.S. (R)	Biochemical Engineering / Chemical Engineering / Biotechnology / Environmental Biotechnology / Applied Microbiology / Industrial Biotechnology / Pharmaceutical Biotechnology / Food Technology (with B.Tech / M.Sc in Biotech) / Bioinformatics (with B.Tech / M.Sc in Biotech).	(i) M.Tech 70% or 7.5/10 CGPA (ii) GATE score not required	(i) M.Tech 70% or 7.5/10 CGPA (ii) GATE score not required	(i) M.Tech 60% or 6.75/10 CGPA (ii) GATE score not required
M. Sc.	Biotechnology / Life Sciences / Biochemistry / Biophysics / Bioinformatics (with B.Tech/B.Sc in Biotech) / Environmental Sciences (with B.Tech/B.Sc in Biotech) / Chemistry / Biotechnology / Microbiology / Biosciences / Genetics / Botany (with Microbiology) / Zoology (with Microbiology) / Life Sciences	(i) M.Sc. 60% or 6.75/10 CGPA (ii) GATE score 600 or valid JRF	(i) M.Sc. 60% or 6.75/10 CGPA (ii) GATE score 550 or valid JRF	(i) M.Sc. 55% or CGPA 6.25/10 (ii) GATE score 500 or valid JRF

**For B.Tech graduates from IITs**

In respect of B.Techs from IITs graduating with a CGPA of 8.0 or above, the requirement of qualification through a national examination is waived off.

**For B.Tech students from Centrally Funded Technical Institutions (CFTI)**

Students from CFTIs (Centrally Funded Technical Institutions - IITs, NITs, IIITs, etc) having CPI/CGPA 7.00 (at 10.00 scale) at the end of 3rd year are also eligible for admission to PhD. The requirement of qualification through a national examination is waived off.

**For Part-Time and Sponsored (full-time) candidates**

- All candidates should have a minimum experience of two years.
- The minimum qualification for these candidates is the same as for full-time candidates, except that the requirement for qualifying in a national examination is waived off.