Department of Mechanical Engineering, IIT Guwahati

Minutes of Departmental Faculty Meeting (No. 68/2021: May 5th, 2021)

Opening Remarks

Department faculty meeting headed by the Head of the Department (Prof S. Senthilvelan) was held in online mode on May 5th, 2021 at 5:00 PM. A total of 34 faculty members (Prof. S. Bag, Prof. A. Banerjee, Prof. S. Basireddy, Prof. D. N. Basu, Prof. P. Biswas, Prof. A. Dalal, Prof. M. Das, Prof. A. K. Dass, Prof. A. De, Prof. U. S. Dixit, Prof. S. K. Dwivedy, Prof. S. S. Gautum, Prof. S. M. Hazarika, Prof. S. N. Joshi, Prof. K. Kalita, Prof. S. Kanagraj, Prof. S. Kapil, Prof. S. K. Kakoty (on DD duty), Prof. P. Khanikar, Prof. V. Kulkarni (on JEE duty), Prof. B. Kumar, Prof. P. Kumari, Prof. S. Mandal, Prof. T. K. Mankodi, Prof. P. Mondal, Prof. N. Muthu, Prof. P. Muthukumar, Prof. A. Nandy, Prof. G. R. Narayan, Prof. S. Pal, Prof. S. Panda, Prof. B. Panda, Prof. M. Pandey, Prof. P. S. Robi, Prof. U. K. Saha (in PhD Thesis defense meeting), Prof. S. Senthilvelan, Prof. D. Sharma, Prof. A. Soti, Prof. R. Tiwari) were in attendance.

In addition to this, staff members (Mr. A. Kalita, Mr. D. J. Bordoloi, Mr. J. Basumatary, Mr. J. Kakoti, Mr. M. Dowarah, Mr. N. K. Das, Dr. R. Saikia, Mr. P. Paul, Mr. S. Ahmed) were invited to participate during the discussion on UG Lab/Workshop budget allocation.

Approval of Faculty Meeting (No. 67/2021: April 7th, 2021)

Minutes of the previous faculty meeting dated April 7th, 2021 were approved by the members.

Agenda

- 1. The faculty and staff members of the department were requested to provide details of the equipment and consumables for under-graduate laboratories (UG Labs) and for personal research work prior to the meeting. The budget allocated to the Department of Mechanical Engineering in 2020-21 was Rs 1,48,00,000 (Rs 70,00,000 for equipment, Rs 40,00,000 for AMC and Rs 48,00,000 for consumables). The institute funding allocated for the first quarter of financial year 2021-22 to Department of Mechanical Engineering is Rs 45,00,000 (Rs 25,00,000 for equipment, Rs 10,00,000 for AMC and Rs 10,00,000 for consumables) and to Central workshop is Rs 23,00,000 (Rs 15,00,000 for equipment, Rs 3,00,000 for AMC and Rs 5,00,000 for consumables).
- Prof. S. Senthilvelan sought the opinion of members on the allocation of the expected budget towards purchasing equipment for 1) UG Labs and for 2) research work. The members agreed on equal distribution of the annual budget under the two headings. The members also discussed the distribution of budget for the funding provided in the first quarter. Prof. P. S. Robi was of the opinion that the coming semester (including UG Lab classes) will most likely be held in an online mode and funding for research work should be given preference over procuring UG Lab equipment. A final decision on this will be taken after more discussion in the coming department meeting(s).
- 2. Prof. D. Sharma shared the details on the equipment (a total of sixteen items from various labs conducting UG experiments) and their expected costs submitted by the faculty and staff members. Prof. S. Senthilvelan and Prof. D. Sharma sought inputs of the members on the items to be procured from the budget to be allocated for UG lab equipment. Delta Robot trainer kit proposed by Prof. B. Reddy was given the highest priority since it was dropped in the previous semester. The list of equipment also included UPS and air-conditioner for server room and PG computational lab. Prof. R. Tiwari and Prof. P. S. Robi suggested to

sought funds for such items under furniture head and not from the ME equipment funding. The priority of the UG Lab equipment was prepared with the consent of the members. Prof. P. S. Robi also suggested to revise the priority list upon procurement of the equipment in the current financial year and carry forward the remaining items to the next financial year. The items in the list not purchased should be given a higher priority upon availability of new funds.

- 3. Prof. D. Sharma also sought views of the members on the AMC and consumables for UG labs. A priority list for AMC and consumables was also prepared with the opinion of the members.
- 4. Prof. S. Senthilvelan discussed the equipment, AMC and consumable for the Central Workshop. Prof. P. S. Robi suggested that CNC Desktop Lathe, CNC Desktop Milling, CNC Lathe Kit and CNC Milling Kit should be given higher priority. Prof. S. Senthilvelan thanked the staff members for their participation.
- 5. Prof. S. Senthilvelan discussed the items requested by individual faculty members for research work. Prof. P. Mondal reminded the members that newly joined faculties (Prof. S. Mandal) who have not utilized start-up funding of Rs 10,00,000 from the department should be given the highest priority as per the decision taken during the department meeting (dated November 13th, 2020). Several faculties (Prof. A. Banerjee, Prof. S. Pal and Prof. S. S. Gautum) were of the opinion that the budget should be equally divided among all the faculties. Prof. P. S. Robi opined that this would discourage procurement of costly equipment. Stream-wise budget allocation was also discussed. Members were of the opinion that the budget allocation for research work should consider previous allocations and members who have not received funding from the department should be given a higher preference. The information on the previous budget allocation will be collated and discussed in the next meeting.

Adjournment

The meeting adjourned at 8:00 pm with vote of thanks.

Department of Mechanical Engineering, IIT Guwahati

Minutes of Departmental Faculty Meeting (No. 69/2021: May 12th, 2021)

Opening Remarks

Department faculty meeting headed by the Head of the Department (Prof S. Senthilvelan) was held in online mode on May 12th, 2021 at 4:30 PM. A total of 37 faculty members (Prof. A. Banerjee, Prof. S. Basireddy, Prof. D. N. Basu, Prof. P. Biswas, Prof. A. Dalal, Prof. M. Das, Prof. A. De, Prof. U. S. Dixit, Prof. S. K. Dwivedy, Prof. S. S. Gautum, Prof. S. M. Hazarika, Prof. S. N. Joshi, Prof. K. Kalita, Prof. S. Kanagraj, Prof. S. Kapil, Prof. S. K. Kakoty (on DD duty), Prof. P. Khanikar, Prof. V. Kulkarni, Prof. B. Kumar, Prof. P. Kumari, Prof. K. S. R. Krishna Murthy, Prof. S. Mandal, Prof. T. K. Mankodi, Prof. P. Mondal, Prof. N. Muthu, Prof. P. Muthukumar, Prof. A. Nandy, Prof. G. R. Narayan, Prof. S. Panda, Prof. B. Panda, Prof. M. Pandey, Prof. P. S. Robi, Prof. U. K. Saha, Prof. S. Senthilvelan, Prof. D. Sharma, Prof. A. Soti, Prof. R. Tiwari) were in attendance.

Approval of Faculty Meeting (No. 68/2021: May 5th, 2021)

Minutes of the previous faculty meeting dated May 5th, 2021 were approved by the members.

Agenda

- 1. Prof M. Pandey on behalf of a three member committee (comprising of Prof. S. M. Hazarika, Prof. M. Pandey and Prof. P. Biswas) shared the modalities of the selection process for the department PhD admission to be conducted in June 2021 with the members. A two-stage selection process (Screening Interviews followed by Final Interviews) was proposed for the Regular and Self-Financed candidates. The number of shortlisted candidates for the final rounds will be twice the number of seats available for each student type and category. Prof. U. S. Dixit suggested to shortlist atleast five candidates if the number of seats for a student category and type are less than equal to two to ensure adequate pool of candidates. A single-stage selection process (Final Interviews only) was proposed for the Sponsored/ External/ Employed/ IITG Project Staff candidates and the candidate having B.Tech from an IIT with $\text{CPI} \geq 8.0/10$. The proposed selection procedure was accepted by the members. Prof. Senthilvelan thanked the committee for their proposal.
- 2. A committee comprising of Prof. M. Pandey, Prof. S. M. Hazarika, Prof. D. Sharma, Prof. P. Kumari, Prof. S. Mandal, and Prof. S. N. Joshi interviewed candidates eligible for IITG-NITA UG Internship and direct Ph.D. Program (Mr. Subhranil Saha, Mr. Ananda Kamal Sur and Mr. Biprarshi Debnath) on 8th May 2021. It was reported that no candidates were found to be suitable for the programme based on their interview performance.
- 3. Prof. Senthilvelan reported that the details of the department budget for the financial year 2021-22 were submitted to the HoS Finance following the discussion on the same in the previous department meeting.
- 4. Prof D. Sharma shared details for hiring a technical staff for CAD lab (please refer to the minutes of the department faculty meeting held on February 3rd 2021) for the post of assistant project engineer with the members. The details were as follows:
 - Qualification: BE/BTech in CS/IT
 - Skills: Proficient in Windows, Linux OS; Computer Network and Hardware; Java,

HTML5, JavaScript, PHP, MySQL, JavaServer Pages (JSP), Python 3, Bootstrap, CSS, Django, Wagtail, Relational database

- Experience: At least 2 years;
- Salary: Rs. 35000 + Rs. 1400 (yearly increment) + HRA(16%) + Rs. 1250 from DPF,
- Job: Server management, LAN management, Linux based platform, website development, and management, Software management, etc.

Several faculties (Prof. K.S.R. Krishna Murthy and Prof. P. S. Robi) suggested that the salary for the staff will exhaust the DPF and an alternative arrangement for recruiting a permanent staff through institute should be discussed. The members agreed that the agenda should be put on hold till a better funding option is available.

- 5. Prof. R. Ganesh Narayan on behalf of a seven member committee (Prof. U. K. Saha, Prof. S. M. Hazarika, Prof. R. Ganesh Narayan, Prof. S. Pal, Prof. B. Kumar and Prof. D. N. Basu) proposed the modalities for deciding the Best Ph.D. and M.Tech thesis awards. It was proposed that the shortlisting criteria for the Best Ph.D. thesis award should be as follows:
 - The applicant must submit the thesis within 6 years from the date of joining the program.
 - The applicant must have at least 3 (three) published/accepted papers in SCI-indexed journals at the date of application.
 - Both Indian & overseas examiners, as well as the supervisor(s), must recommend favourably for the "Best Thesis Award" in their respective thesis evaluation reports.

Prof. S. M. Hazarika opined that the hundred point system for the final selection was structured to encourage every aspect of a Ph.D. thesis. It was proposed that the 100 points will be divided into two segments (75 for quantitative aspects related to publications, patents, conferences and awards, and 25 for the qualitative evaluation by an appropriate selection committee). Several faculties suggested valuable points on the nitty-grities of the point structure. Prof. U. S. Dixit opined that instead of assigning points for plagiarism, such thesis should not be shortlisted in the first place. Prof. P. Khanikar enquired if the points allocated for the patents are after filing or after publication and also suggested to add points for prestigious fellowships. Prof. R Ganesh Narayan responded that filing a patent was sufficient and also noted his suggestion on fellowships. Prof. P. Kumari opined that since the Ph.D. programme is funded for 5 years, the criteria for awarding points for completing the Ph.D. in four or fewer years was not appropriate. Prof. R. Ganesh Narayan responded that the Ph.D. candidates who achieve their degree in lesser time should be given credit and this will not be an incentive for completing their work hastily. Prof. Senthilvelan informed that the institute form to be filled by the external examiners has a polar question on whether the thesis should be considered for the best thesis award and since this is already a shortlisting criteria, it is redundant to allocate points for examiner's recommendation. The committee also proposed a shortlisting and selection criteria for the best M.Tech thesis award. The shortlisting criteria were:

- The final CGPA, as well as CPI in all four semesters, of the applicant must be 8 or above.
- The applicant must receive a grade point of 10 in the 4 semester

A similar 100-point system was also proposed for the final selection of the award. Prof. Senthilvelan thanked the committee for framing the selection procedure, thanked the members for their suggestions and requested the committee to revise the selection procedure based on the inputs of the members.

6. Prof. Muthukumar requested for reallocation of ME 111 Engineering Drawing tutorial in the coming semester if possible since he is teaching an additional course in the Center of Energy (along with the ME 311 Heat Transfer core course). Prof. S. Senthilvelan opined that the course allocation was discussed at length in department faculty meetings and this point should have been raised then. Prof. Senthilvelan further suggested Prof. Muthukumar to discuss this with members at an individual level and not at the departmental level.

Adjournment

The meeting adjourned at 6:00 pm with vote of thanks.