IRDC Meeting - 1: Director's address to IRDC

Four broad areas covered in Director's address include, a) research vision, b) quantum of funding/ nature of resources, c) administrative matters and, d) role of IRDC.

- 1. Director desires IRDC's role to be that of a consultative group in R & D. Its recommendations would be sought in matters such as thrust areas, new frontiers, funding agencies, and creation of Institute-level facilities.
- The complexity of R&D administration has increased as the quantum of funding has moved from 2 crores (a decade ago) to the present funding of 84 crores. The Institute should aim for Rs. 100 crores in the golden jubilee year.

3. It is desired the faculty members will involve themselves in large collaborative projects that would have a national impact. At present, a simple ABC analysis of the distribution of projects reveals a large number of projects with a funding of Rs. 20 lakhs or less, typically supported by DST, MCIT, CSIR, and others.

4. Golden jubilee is expected to be a turning point and the Institute should take up large projects in the following areas: a) energy b) environment, c) materials, d) communication, e) computing (simulation), f) infrastructure, and g) health.

In order to have a global impact, one or more of the following models can be adopted:

a) A large laboratory within the Institute (with an acute focus), for example Beckman Lab at UIUC; Draper Lab at MIT, Argonne National Laboratory, Chicago, Lawrence Berkeley laboratory, USA;

b) Joint appointments of faculty in multiple departments;

c) Streamlining the research ethos via creation of Centers – transformation of Centers to international laboratories;

d) Creation of honorary research faculty positions to formally establish international relationship with renowned institutes such as MIT and UC Berkeley.

5. The strategy of IRDC would be to focus on developing new ideas which should create new research opportunities (inter/intra institute collaboration as well as to facilitate research with the available infrastructure).

- 6. IRDC is expected to be responsible for the following: a) Review the activity of centers, b) Suggest how to decentralize the work-load in R&D office by involving Departments in managing staff recruitment and contingency expenditure, c) Suggest policy changes to bring accountability/clarity of R&D administration processes. [Director has advised the Institute to avoid project appointments for duration longer than 5 years.]
- 7. The suggestions of the various faculty members are summarized in the following:
- a) Create area-specific research space, R and D building.
- b) Software based file tracking system (like SAP) to streamline R&D administration.
- More linkages with Indian private industries through the involvement of Confederation of Indian Industries (CII).
- d) Retaining good quality project staff with healthy salaries and good accommodation.
- e) Establishment of visiting faculty scheme for experienced persons from non-academia, private industries, MNCs and PSUs.
- f) Achieving career progression of research engineers/officers.
- g) Assess periodically the deliverables/accountability of research projects.
- h) A collaborative atmosphere to facilitate interdisciplinary research should be created.
- i) The Institute should create a lab safety cell to monitor the disposal of hazardous waste as well as to ensure the necessary safety aspects in various experimental research labs.
- j) It is suggested that Prof. P.M. Prasad of Economics department will prepare R&D guidelines (dos and don'ts) as a handy-guide to the incoming faculty.
- k) The workshop facilities available across the institute should be strengthened to facilitate both large and small R&D projects.
- Prof. S. Ganesh of the BSBE department has been requested to prepare a white paper on how to create Department Research Development Committee (DRDC), which should advise, among others, new faculty members for grant applications.
- m) In IWD, a special cell should be established to facilitate civil/electrical works at research labs.

- n) To strengthen industry-institute interactions, senior executives from industries such as GE and GM may be invited as visiting faculty to IIT Kanpur.
- o) Provision of AMC charges in the project proposal involving large equipment is essential.

Any other matter: Dr. Bikramjit Basu was nominated as the Coordinator of IRDC for the period May 2008 to April 2010. Services provided by the outgoing coordinator, Professor Sarvesh Chandra were gratefully acknowledged.

The meeting ended on a very positive note.

Prepared by

Dr. Bikramjit Basu Convener: IRDC

10th June 2008

IRDC Meeting -2

Review of SAMTEL Center for Display Technology (SCDT)

The Director glanced through the major slides of the SCDT review report, which was to be presented by Professor Satyendra Kumar, Head, SCDT.

The following suggestions were discussed during the review meeting:

1) Effort will be made to hire two technical persons for SCDT.

2) An asset management company can be contacted to take care of the maintenance and security aspects of SCDT. In an era of *clean rooms*, this point becomes important.

3) Some of the western lab rooms can be converted to reprocessing and micro-fabrication facilities that SCDT can make use of.

4) Director suggested that one of the future focuses of SCDT activities should be in the area of solar energy, in particular organic solar cells.

5) The office staff recruitment for SCDT should be made through a proper advertisement.

IRDC Meeting -3

Review of Center for Archeology Science and Technology (CAST)

Professor Onkar Dixit presented the activities of CAST, in particular the research activities of archeomaterials and dating laboratories. The major activities involve database formation for monuments. These activities use a number of sophisticated techniques, e.g. GPS, GIS, GPR, and the terrestrial laser scanner. Additional techniques used are thermo-luminescence and optically stimulated-luminescence.

The following major points were discussed:

1) It is suggested that the *history of IITK* should be one of the focus area of CAST.

2) The faculty members involved in CAST should offer elective courses and NPTEL courses in the general area of archeology.

3) One of activities can be in the area of development of indigenous technology in the domains of both software and hardware.

IRDC Meeting -4 Review of the Nanotechnology Initiative

Professors Y. N. Mohapatra and Sudeep Bhattacharya presented major activities under the nanotechnology initiative. It was stated that the current focus is more towards developing a multi-element focused ion beam facility, use of FIB in futuristic manufacturing, and organic electronics.

The following points emerged during the discussion:

1) A formal approval is required to create a name such as *Centre for nanotechnology*.

2) Railways have shown interest in absorbing technologies at the nano-scale. In this connection, DG - RDSO Lucknow should be invited to visit the nanotechnology research facilities at the Institute.

3) Technical peer groups need to be formed. Members would comprise international experts from USA, Europe and Asia. A periodic review of activities of the group in nanotechnology is essential since the subject, internationally, is fast evolving.

4) Quite a few of our colleagues are involved in nano-scale research. IRDC will prepare a comprehensive list of faculty and staff who may wish to participate in the ongoing initiative.

5) Ideally, the nanotechnology activities should include a broader spectrum of research, for example, nano-materials, nanocomposites, and nano-fiber based scaffolds for biomedical engineering applications.

Minutes of IRDC Meeting held on 9th August 2008 in FB-212

Members Present: Dr(s). K.Muralidhar (Chairman), B.Basu (Convener), S.Ganesh, Amalendu Chandra, T.V.Prabhakar, Ashutosh Sharma, Purnendu Bose, S.S.K.Iyer, P.M.Prasad, V.Raghvendra, Debopam Das, N.N.Kishore, R.C.Budhani, Jayanta Chattejee, B.V.Phani, S.Umesh

- 1. DORD announced the details of CARE proposal submission. Some members desired that the institute should consider the enhancement of CARE funds to Rs. 3 crores. The increased cost of many of the high end research equipments was cited as the justification.
- 2. An important suggestion was that a small amount of CARE fund be allocated for special purpose equipments of less than Rs. 10 lakhs and for maintenance of CARE equipments. A number of IRDC members expressed concern at the functioning of the internal audit.
- 3. DORD announced the status of revision of the *stores and purchase* manual. A number of IRDC members expressed the opinion that Stores & Purchase revision committee should have representative from IRDC or the faculty.
- 4. With reference to the Stores and Purchase manual, the following suggestions were made:
 - Minimum purchase without quotation needs to be boosted to Rs. 1 lakh.

- An interface between DORD and internal audit be established to facilitate the placement of purchase orders.

- A clear guideline of stores & proprietary items, LTAS, and procedure of write-off is required.

- 5. Dr. Sundar Iyer briefed IRDC on *Solar cells* initiative of DST. It seeks involvement of faculty members of various IITs in a product oriented research
- 6. DORD informed IRDC on Students Gymkhana initiative named Notes on Engineering Research & Development (NERD).
- 7. Competence and rules to handle International funding agencies needs to be set up at DORD office.
- 8. One statement "the numbers may not match" on DORD Online website should be removed.
- 9. Dr. S. Umesh briefed the need for an additional RA hostel. IRDC unanimously agreed for immediate need of a new RA hostel with 100 rooms. IRDC also suggested that the Institute should plan for another RA hostel with 300 rooms for visitors of various types (including international guests/students). New RA hostel should have at least 150 rooms with equal number of single rooms without kitchen and studio-type apartments. Possibly a few units of the VFA type can be included.
- 10. Dr. Ganesh presented the concept paper on DRDC formation. Some IRDC members expressed their opinion that the role of IRDC would become important if some financial power can be transferred or delegated to DRDC from DORD office. During discussion on

IRDC proposal, a few IRDC members also expressed the necessity for the position of Associate Dean, R&D. This has emerged as a parallel suggestion to DRDC formation. IRDC requested Dr.Ganesh to revise the proposal to include the following suggestions:

- DRDC may have one Research Engineer as a member
- Clarity in the role of DRDC in terms of its role on administrative and financial authority.
- 11. DORD requested IRDC to convey the following to faculty colleagues:
- When no advance is to be drawn, PI can send an e-mail to DORD with a copy to respective Head, for project related journey approval. However, TA can be reimbursed to PI, subject to the availability of funds.
- HOD's signature on purchase order form is not required for purchases of less than 4 lakhs.
- 11. Dr. P. M. Prasad briefed about the R&D document in preparation. He is requested to present a detailed/complete version in one of the future IRDC meetings.

Bikramjit Basu Convener: IRDC

22nd August 2008

Minutes of IRDC Meeting (Review of Centers) held on 15th September 2008

Members Present: Dr(s). K. Muralidhar (Chairman), B. Basu (Convener), Ashok Kumar, S.S.K.Iyer, V.Raghvendra, N.N.Kishore, B.V.Phani, Rajan Moona, D. Kunzru, Kamal K. Kar, N. K. Sharma, Mr. Navpreet Singh

After reviewing the activities of the SIDBI Innovation & Incubation Centre (SIIC) and Prabhu Goel Research Centre for Computer and Internet Security, the Director made the following suggestions:

- 1. The Director formed a committee comprising of Drs. Phani, Moona and Basu to write a concept paper on the 'Proposal for a five year dual degree programme with BTech in any branch of engineering and MTech in Enterprenaurship'. Such a programme will admit the students through IIT /JEE channel and the students will need to make a choice at the end of foruther semester for MTech in Enterprenaurship.
- 2. The Director also suggested Dr. Phani to convene a workshop for the enhancement of the interest of the IIT Knapur faculty members to initiate start-up companies. Such workshop should have invited talks by academic professionals turned CEOs of some successful companies.
- 3. The Director proposed that the donation from '83 batch (~ 1.5 crores) can be partially utilized in sponsoring some product design related activities of the BTech students, who are associated with the existing companies of SIIC.
- 4. Dr. Moona was requested to prepare a more corporate-oriented report for Prabhu Goel center, clearly highlighting the important achievements with specific examples. Also, the center should continuously nurture the relationship with the donor, Dr. Prabhu Goel.
- 5. The Director expresses its concern that the official IIT K website is hacked by external users often and requested Dr. Moona to devise ways on how such incident can be avoided.

Bikramjit Basu Convener: IRDC

16th Septmber, 2008

Minutes of IRDC Meeting held on 17th October at PBCEC

Members Present: Dr(s). K. Muralidhar (Chairman), B. Basu (Convener), S. Ganesh, S.S.K.Iyer, V. Raghvendra, N.N. Kishore, T. V. Prabhakar, N. Verma, N. K. Sharma, Satyaki Roy, Jayanta Chatterjee, Amalendu Chandra, C. Venkatesan, R. C. Budhani, M. K. Harbola (special invitee).

1. The minutes of the earlier IRDC meetings were confirmed.

2. *UG research conference*: Arvind Kothari presented the concept paper for the initiative to hold UG research conference during the Golden Jubilee Year. After extensive discussion, IRDC expressed positive opinion and IRDC members suggested that (a) a faculty advisory committee should be formed to guide the students, (b) the possibility of online publication of the proceedings should be considered.

3. *NERD*: Mohit presented the activities of NERD, the R&D newsletter of students. IRDC members appreciated the efforts to publish the magazine on a quarterly basis.

4. DORD announced the formation of two sub-committees:

a) Work Assignment, with the following membership: DORD, IRDC Convener, AR/DORD,

Dr(s). Satyaki Roy, and S. S. K. Iyer.

The committee will provide input to the Institute on the modality of short-term appointments staff (semi-skilled manpower) on projects to assist faculty in miscellaneous activities.

b) *Maximum tenure of staff on projects*: DORD, IRDC Convener, AR/Legal Cell, Dr(s). Kishore and Amalendu Chandra

The above committee will recommend on fixing the maximum number of years that a project personnel can spend on project appointment within the Institute.

5. *RA hostel*: DORD announced that papers for the preparation of 200 more rooms in the RA hostel complex have been approved at various levels. We expect 100 rooms to be available by the end of 2009.

6. *Students on projects*: It is well-known that money is saved by the Institute on scholarships when MTech and PhD students are supported on sponsored projects. In a new development, Institute has categorically assured transfer of these savings to the respective Departments.

7. *Institute support for sponsored research*: DORD apprised IRDC that the Institute will soon invite detailed research proposal (e.g., in DST format) from faculty members and the total amount of funding available would be of the order of Rs 4 crores. A total of 4-5 such proposals would be supported. Follow-up support in the second and the third years would be available.

8. *Promotional videos*: DORD announced that Dr. Satyaki Roy can help various Departments, IDPs and Centers prepare videos (5-6 minutes duration) that can be used on various occasions: conference inauguration, for example. IRDC members are requested to consult their respective Heads and prepare a script for this purpose.

9. *PG Admissions to project employees* (agenda item brought forward by Dr C. Venkatesan): IRDC discussed the aspect of sponsorship of project employees for the M.Tech program. Although, no consensus could be arrived at, some suggestions were made along the following lines:

a) A sponsored candidate must have spent at least a year before applying for MTech admission.

b) GATE score can be waived.

c) Research Assistantship for two years need to be ensured.

d) Sponsored candidate has to appear in interview/written test as desired by the selection committee.

The meeting ended with a word of thanks to the Chair. Bikramjit Basu Convener: IRDC

20th October 2008

Members Present: Dr(s). S. G. Dhande, K. Muralidhar (Chairman), A. Upadhyaya (Actg. Convener), IRDC members

Special invitees: K. Poddar and S. Basu

1. National Wind Tunnel Facility (NWTF)

Dr. K. Poddar provided an update about the current activities of NWTF and also proposed a plan for HRD. A copy of his report and presentation are uploaded on DORD website.

Currently, NWTF has a two-tier management structure and works as per the guidelines issued at national and Dean's level. The IRDC committee members felt a need to constitute an academic advisory committee which will have representation from various departments within the institute as well as from outside academic and research institutions. It was suggested that this will further promote interdisciplinary activities. In addition, it was felt that NWTF should define its short-term as well as long-term program both with academic as well as research perspective. Besides being a testing facility, about 30% of the time should be made available to the institute faculty and student members for their research. It was stressed upon that there is a need to consolidate the computational, instrumental and experimental components at NWTF.

The committee members also opined that NWTF should have a professionally managed organizational structure which should have guidelines for administrative governance and other policy matters. It was also suggested that NWTF should present its budget under recurring and non-recurring heads. To better disseminate the ongoing activities at NWTF both within as well as outside IIT/K, it was recommended that NWTF brings out a newsletter. It is also desirable that both the existing as well as the potential users should be periodically updated about NWTF activities through email as well as discussion forums.

It was emphasized that student involvement needs to be encouraged and increased. This can be done by hiring and training undergraduate and postgraduate students on short-term or medium term basis. One of the models suggested was to advertise well in advance the requirement.

For regular appointment of technical and support staff, Head NWTF was advised to contact the registrar through DORD.

2. Digital Innovation Lab (DIL)

Dr. S. Basu presented the update about the DIL activities. A copy of his report and presentation are uploaded on the DORD website.

DIL facility is currently being used by the faculty members and students of the Mechanical Engineering, Civil Engineering and Design program. In particular, the students of Design programme are using the 3DS Studio Max software for several of the architectural and functional prototype designs.

While some of the students are using AutoDesk for their BTP projects, its wider use as teaching tool is yet to be realized to its full potential. This was attributed to the reluctance to shift over from 2D-based AutoCad to the solid (3D) drawing software (e.g. Inventor) provided by AuotoDesk. The committee members felt that it is important for the Digital Innovation Lab to have a broader vision. It was suggested that in addition to housing AutoDesk, DIL should also have an inventory of other software as well.

It was also proposed that the lab should adopt the student-model of governance. For this, select students in each semester should be provided both in house as well as on-site training by AutoDesk personnel.

The meeting ended with vote of thanks to the Chair.

Prepared by A. Upadhyaya and B. Basu

Minutes of IRDC Meeting held on 3rd January 2009 at PBCEC

Members Present: Dr(s). K. Muralidhar (Chairman), B. Basu (Convener), B. Prakash, A. Pradhan, S.S.K. Iyer, D. Kundu, A. Agarwal, A. Singh, Satyaki Roy, Amalendu Chandra, A. Kushari, V. N. Kulkarni, Deepak Gupta, Kumar Ravi Priya, S. Qureshi, S. Umesh (special invitee).

1. The minutes of the earlier IRDC meetings were confirmed.

2. *Research Complex*: DORD informed the IRDC that a research complex (RC), occupying around 10000 m² floor area would be located near airstrip. Normal construction time is two years, once the proposal is approved in principle by the Institute. The layout of the RC should be designed in such a manner that it will primarily facilitate the cross-fertilization of research ideas and promote more interdisciplinary research. A futuristic building is envisaged in which laboratories would have essential amenities such as stabilized power, water supply, compressed air and air-conditioning. Some of the laboratories would be designated as clean rooms while special rooms for library and discussions would also be available. The spaces in the RC can be allotted to groups of faculty members whose interests coincide with thrust areas identified periodically by the Institute. Space allotment for conducting sponsored projects is also planned. While the overall building would be maintained by the Institute, faculty participation is expected for the upkeep of the individual laboratories.

Following these comments, there was a discussion on overall faculty aspirations as well as the layout for the proposed RC. After a detailed discussion for around an hour, the following points emerged:

a) IRDC members, at large, welcomed the idea of having a research complex on campus. The entire space should be divided into several bays and each of them will be used for different group

of faculty members. For example, one of such bay will be used by theoreticians as discussion room with appropriate partitioning. Other bays can be used as clean room, animal house, general lab space for housing high-end equipment, and computational laboratories. Another suggestion was that some space can be allotted for projects of short term basis (five years or so), while rest of them will be for long term research. It was proposed that it may be better to have four storey towers with a cafeteria in the central region. A rough estimate reveals that the proposed RC will cost around Rs. 80-100 crores.

b) IRDC members largely emphasized on the fact that it is important first to identify the thrust areas of the Institute and keeping those areas in mind, the layout of the proposed RC can be designed.

c) It has also been recommended that RC cannot be used as general central facility, for example ACMS.

d) Some IRDC members mentioned that the appropriate functioning of various sophisticated research facilities require trained personnel.

e) IRDC members, at large, opined that this issue should be discussed at the department level and subsequently can be brought as an agenda item in one of the future IRDC meeting. This will enable discussion with more clarity.

3. Accommodation for Project Employees: Dr. Umesh mentioned the immediate need for accommodation of 60 project employees. IRDC was informed that a new RA hostel with 164 rooms for project employees will be in place by 2010 June. As a short-term solution, some Type IA houses may be converted to house project employees by June, 2009. IRDC also opined that IWD should do the needful to speed up the renovation of those identified Type IA houses.

4. *Work Assignment*: Dr. Basu presented the minutes of the work assignment committee (a copy also enclosed herewith). IRDC was informed that around 400 persons are currently associated

with the work assignment mode. IRDC members recommended that multiple national level contractors should be given the contracts to operate within the campus. For unskilled / semi-skilled personnel, local people around IIT K campus should however be given priority. Also, it was emphasized that all the current work assignment persons should be registered on a priority basis by the contractors.

5. *Maximum tenure of project staff*: Dr. Chandra presented the report before IRDC and a copy is enclosed herewith. After a brief discussion on the socio-economic aspect, many IRDC members expressed the opinion that the project staff, in particular, the project personnel hired on a temporary basis should view their stay on campus as training and be advised to look for better professional jobs in the long run. Project employees will be initially allowed to work in the project mode for six years. After six years, if a person is till found very useful by a PI, then a strong case needs to be put forward. However, the performance of such project staff will be periodically evaluated after every three years.

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

Bikramjit Basu

Convener: IRDC

12th January, 2009

Enclosures:

- 1. Report of Work Assignment Committee
- 2. Report of committee to discuss 'Maximum tenure of staff on projects'

Minutes of the Work Assignment Committee meeting held on 30th December, 2008 at 4 pm at DORD Office

Members present: DORD, IRDC Convener, AR/Legal Cell, AR/DORD, Dr(s). Satyaki Roy, and S. S. K. Iyer.

Preamble: Work-assignment as a channel of appointment was introduced around 1999. The idea was to employ individuals on an emergency basis to accomplish certain project-related tasks of great urgency. Such employments do not require an appointment letter of the Institute. They are meant to be of three month duration.

It has been observed over the last one decade that a large number of persons are recruited through the work assignment mode to perform tasks that are of non-technical nature. In addition, the appointment is continued for several years together. We have received legal opinion that such appointments are not tenable in a court of law and must be immediately dispensed with.

After a detailed discussion on the socio-economic aspect of this issue, the committee has suggested the following aspects:

- 1. In the current implementation scheme for employing persons through work assignment route, no official agreement is signed between the person hired on *work assignment* mode and the Institute. In order to ensure legal aspects, any employer in the Institute should have an agreement with the employer. Therefore, the present mode of hiring under this particular category does not meet the demanding legal criterion.
- 2. The committee proposed that the Institute can allow a panel of private contractors of national repute to provide unskilled and semi-skilled manpower. For unskilled employment, local residents should be given priority. The institute will sign an agreement with the contractors so that the law-of-the-land is strictly enforced. Payment of PF and health insurance will be ensured.

Minutes of the meeting held on 30th December, 2008 at 5 pm at DORD

Office to discuss maximum permissible tenure of project staff *Members present*: DORD, AR/Legal Cell, AR/DORD, Dr(s). Satyaki Roy and A. Chandra

Preamble: It has been observed that there is no upper limit to the total tenure of a project employee at present. There are people who have remained appointed in projects over 10-15 years by switching from one project to the other. The committee was asked to look into matter from both legal and professional view points and make appropriate recommendations regarding continuity or discontinuity of such a practice.

A detailed discussion took place on the matter. There was a general feeling that by continuing with the same person over so many years and over so many projects, probably the best talents are not properly searched for. Also, although all project employees are required to undertake in writing that their appointments are temporary and for a limited period, continuation in such modes of appointment over many years by switching from one project to the other may cause legal complications. It was noted that some of the other IITs have already put an upper limit to the total tenure of project employees. For example, IIT Kharagpur has a limit of 5 years.

In view of the above discussions, the following recommendations are being made by the committee:

1. A person can continue as a project employee over a total period of six years (i.e. over two 3year projects).

2. Continuation beyond six years would be allowed only after a thorough evaluation of his/her performance over the past six years. A strong case has to be made by the PI whenever such a continuation is sought.

3. These new policies would be applicable to all new appointments. The existing appointments will be allowed to continue as per their present terms and conditions.

4. The above recommendation does not apply to registered students, who may be simultaneously employed on projects.

Minutes of IRDC Meeting held on 30th January 2009 at 2.30 pm at FB 212

Members Present: Director S.G. Dhande, Deputy Director R.K. Thareja, Registrar S. Kashalkar, Dy. Registrar (Accounts), Asst. Registrar (Stores & Purchase), Audit Officer, Asst. Registrar (RPG), Asst. Registrar (R&D), R.K. Garg EE (IWD); Dr (s). K. Muralidhar (Chairman), B. Basu (Convener), B. Prakash, A. Chandra, N. Verma, S. Qureshi, Kumar R. Priya, D. Kundu, A. Kushari, V. N. Kulkarani, Anoop Singh, Runa Sarkar, Ashok Kumar, Jitendra Kumar, Satyaki Roy, Anjali Kulkarani, Subrata Sarkar

I. Golden Research Complex

The Director addressed IRDC on the proposed **Golden Research Complex (GRC).** The Director expressed his vision that a transformation of IIT Kanpur from a renowned engineering institute of repute in undergraduate teaching would take place into an internationally renowned research university in the next 25 years. Necessarily, the Institute should encourage and facilitate greater interdisciplinary research. Such vision has been particularly relevant as IIT Kanpur celebrates its Golden Jubilee during 2009-2010.

An important step towards progressively moving towards a organization of repute is the availability of a state of-the-art research complex. Internationally, examples can be found wherein a frontier research laboratory is nested within an academic campus. One can name a few such as Brookhoven National Lab, Draper Lab, Lawrence Berkeley National Lab, and the Argonne National Lab.

Director pointed out that the last one decade has seen the initiation of interdisciplinary research in the Institute with success in terms of joint guidance of students, joint projects and publications. The example of Samtel Center (established in 1999) was given. The proposed GRC is expected to boost such activity to a much higher intensity and will bring a new dimension to interdisciplinary research activities.

Following the Director's address, the following suggestions/comments were made by members of IRDC:

- 1. In view of the societal as well as national needs, the thrust areas of proposed research center, i.e. GRC will include Energy, environment, communication, computation, and materials. Director however emphasized that it is *broad based research programs* and not the *research project* that drive activities in GRC. This should enable the researchers to pursue creative path-breaking ideas in an interdisciplinary environment.
- 2. In addition to housing state-of-the-art experimental research facilities, it is to be emphasized that substantial space area will be provided for theoreticians. It was mentioned that reputed institutes, like Cornell University has a unique *theory center*. Director also suggested that colleagues from HSS and IME departments can contribute to research by preparing lead-papers and policy making documents for the Indian Government.
- 3. Director set out the size of GRC as a large establishment, to be built over an area of around 25,000-30,000 m² floor area. However, he stressed upon the fact that once the concept of GRC is clear, the specific architectural details can be worked out with the help of Institute building committee and architect. While a number of IRDC members expressed that clean rooms (of varying grades for 100 to 10,000) will be housed inside GRC, specific needs have to be spelt out.
- 4. It was suggested that space be allocated for test bed facility where prototype fabrication and product development can be carried out.
- 5. It was suggested that some laboratories of GRC could be operated jointly by IIT Kanpur and private companies. However, private companies cannot use the facility as *space for rent*. This concept will be in sharp contrast to the establishment of the Rs 100 crore worth Research Park at IIT Madras, where private companies maintain individual research laboratories with complete disconnect from the parent Institute.
- 6. If necessary, a delegation from IIT Kanpur may visit different reputed laboratories around the world, prior to the formulation of the layout.
- 7. Director suggested that a **concept paper** needs to be ready and such concept paper should clearly highlight the philosophical aspects of transformation of IIT Kanpur from an educational organization to a high quality research institution. This concept paper should also mention the research agenda, manpower requirement, and facility aspirations of the faculty, research engineers and student community.
- 8. Once the concept paper is ready, IRDC should organize the open house with colleagues from various departments.
- 9. Apart from MHRD for initial financial support, the newly established National Science and Engineering Research Board (NSERB) will be approached for necessary funding of the operational aspects of GRC.

II. Administrative changes at DORD office

Mr. K. V. Satya Murty presented various aspects of administrative changes at R & D office. It was mentioned that the office of Dean, R&D is currently handling 320 sponsored projects, worth of more than Rs 50 crores. Briefly, his presentation focused on the aspects of governance structure for R&D management, research infrastructure development, human resource strategy for research staffing, strategy for research excellence as well as evolution of R&D division as a Strategic Business Unit (SBU) through a process of transformation. Mr. Satya Murthy also presented the strengths, weakness, opportunities, Threats (SWOT model) for DORD office. His presentation was highly praised by Director. Following his presentation, the following suggestions were made by the Director as well as by IRDC:

- 1. A number of IRDC members emphasized that the institute should procure a stateof-the-art project management software. Director suggested that a coordinating officer at DORD will be available as an interface with office automation.
- 2. It was largely felt that more space is required for effective working of DORD office. IRDC was informed that once DOAA and GATE office will move out by April'09, the entire space of those divisions will be provided to Dean, R&D.
- 3. Also, the periodic training of staff members will be organized at regular interval and IRDC members need to participate in such endeavourer. The participation of some IME faculty members would be helpful.
- 4. Also, clustering of people for doing the paper work for specific departments (e.g. one person for CHM, CHE and MME together) should be arranged. Each department needs to provide one person to R&D office.
- 5. It was also suggested that e-mail statement for each Principal Investigator for individual project should be sent after each month.
- 6. An open house for PIs will be organized soon, preferably on a Saturday. The feedback from the PIs on the proposed administrative changes will be sought.
- 7. The above changes are particularly relevant in the wake of the increased requirements by a number of funding agencies to show more detailed records, such as manpower of asset details, for example, now routinely required by DBT.
- 8. It was envisaged that with the proposed changes, DORD office will perform with a better speed and accuracy and as a result, each PI will be benefited.

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

Prepared by

Bikramjit Basu IRDC Convener 9th February 2009

Minutes of the IRDC Meeting held on 4th April 2009 at 11 am in PBCEC

Members Present: Drs. K. Muralidhar (Chairman), B. Basu (Convener), B. Prakash, R.N. Mukherjee, R. Moona, RajPala, S. Qureshi, Kumar R. Priya, D. Kundu, A. Kushari, V. N. Kulkarani, B.V. Phani, Utpal Das, Satyaki Roy, Deepak Gupta, Rashmi Parihar, J. Subramaniam and Mr. K.V. Satyamurty.

1. Expansion of IRDC: Director recently approved the inclusion of a representative from student community (nominated by President, Students' Gymkhana), one representative from project employees (nominated by Convener, IRDC) and one representative from Design and Scientific staff members (nominated by DORD) to IRDC. The recent inclusion was made to know the aspirations from the student community, project employees and research engineers. IRDC welcomed Dr. J. Subramaniam and Ms.Rashmi Parihar as new members. The students' representative, Mr. K. Sudheendra Rao could not attend the meeting.

2. Mr. Veerender, an undergraduate student presented the concept and plans of the recently launched students' body - **POWER** (Promotion of Work Experience & Research). This body has been formally launched on April 2, 2009 and is formed under Office of Research & Development to support students' ideas as well as to provide them opportunity to work on the real life problems from industries and various government bodies. After the presentation, IRDC discussed it over half-an-hour. A number of IRDC members opined that the involvement of the faculty is necessary to ensure the success of ideas as well as to manage financial aspects. IRDC members also suggested members of POWER to carefully think on the aspects of sustainability as well as to integrate their activities with those of SIIC. It was also opined that POWER should identify some problems in emerging or internationally important areas such as energy, automotive, and environment and nurture nucleation of small group of students to work on each of such problems. It was mentioned that large multinational companies often search for a group of young minds to work on some small scale well defined problems and POWER members can play an important role.

IRDC convener suggested that POWER members should carefully incorporate all the details, based on the input and the revised presentation file be uploaded on POWER website (http://students.iitk.ac.in/power/).

3. Dr. B.V. Phani presented the concept and details of the proposal entitled *Academic Administration System* (AAS). It was mentioned that AAS should have all links such as R & D and stores on the

opening page and will have information retrieval. The components as well as implementation aspects of AAS was discussed in greater detail. IRDC was informed that the ASS model has already been implemented in Shinshei bank, Japan and this model has been originally developed by Dr. J. Dwivedi.

After the presentation, IRDC discussed various pros and cons of AAS. IRDC, in general, suggested that the user input on AAS must be taken during the implementation stage. Also, AAS should have sufficient compatibility with frequent upgradation depending on the users' newer requirement and satisfy legal issues. A core team of faculty consisting of Drs. Rajat Moona, Balaji Prakash, Satyaki Roy, B. V. Phani, Deepak Gupta/nominee and Mr. K.V. Satyamurty has been formed to have an effective communication with the AAS software provider as well as to convey specific/detailed requirements of PIs. It is expected that core faculty members will take the input from PIs prior to such discussion with the software provider.

4. Dean, R&D made a number of announcements.

a) It was announced that all research proposals for funding agencies need to be forwarded by Head of the Department. This suggestion was made primarily to bring HOD into confidence that the department will provide necessary support such as time, space, and manpower to ensure success in research. A note-file will be sent to all academic staff to mention the specific requirements that they may need to execute the proposal, while getting the proposal forwarded by HOD. It was also emphasized that the softcopy of all submitted proposals should be sent to <u>avanti@iitk.ac.in</u>.

b) Except for fast track and young scientist schemes as well as awards such as Swarnajayanti, a number of funding agencies often require that each proposal should have one or more Co-PIs. The Institute feels that collaborative proposals would have greater impact. After a detailed discussion on the pros and cons of the inclusion of Co-PI, DORD suggested the following:

- i) It is essential to have Co-PI for those funding agencies that require it.
- ii) It is understood that Co-PI will have a role akin to an *administrative co-PI* for internal purposes of record keeping. The Co-PI does not automatically gain intellectual credit unless an explicit scientific contribution is claimed.
- iii) If a faculty member so desires then he/she may include HOD as co-PI.

c) Mr. Satya Murty briefed the IRDC about the opening of bank accounts of PIs at UBI. This step has greatly reduced paper work in the R&D office. The interest accrued for each PI's account would be transferred to the Institute. Also, DORD office can issue a certificate stating that each project account has been opened only for project-related transactions.



Indian Institute of Technology Kanpur Institute Research and Development Committee

Minutes of the IRDC Meeting held on 25th April 2009 in PBCEC

Members Present: Drs. K. Muralidhar (Chairman), B. Basu (Convener), Pradip Sinha, A. Chandra, R. Moona, Nishith Verma, S. Qureshi, Kumar R. Priya, Anoop Singh, K. Poddar, S. Sangal, J. Subramaniam (representative of regular scientific/Design staff), Ms. Rashmi Parihar (representative of Project Associates working for sponsored projects), and Mr. K. Sudheendra Rao (representative of PhD students).

1. Co-PI in sponsored research projects: Convener mentioned specific comments of some IRDC members in reference to the DORD announcement on the issue of Co-PIs. In today's meeting DORD further conveyed to IRDC the nature of discussion held in the Deans' group meeting, where it was stated that it is desirable to have a co-PI ideally in a normal sponsored project. This is particularly relevant as the Institute desires its faculty members to carry out research on complex challenges or on experimental topics of inter-disciplinary nature in a time-bound manner. Having a co-investigator with complementary research interest is expected to result in intellectual property enhancement, a factor that is also of considerable significance to students. DORD also mentioned that DST, in a recent communiqué, emphasized the need of co-PI for projects to be submitted to different PACs under Engineering Sciences within SERC. Such a decision on the part of DST is due to various reasons, including discharge of administrative and technical responsibilities especially in the absence of PI usually for period in excess of 3 months. DBT often advises PIs to have co-investigators prior to the approval of task force projects. After a long discussion on the subject, the following recommendation is being proposed:

- i. PIs are encouraged to have co-investigators in sponsored projects.
- ii. Projects that are equivalent to awards (e.g., Swarnajayanti) will not have co-PIs.
- iii. Consultancy projects can have a single project investigator.
- iv. For DST proposals to be submitted to Engineering Sciences, it is obligatory to have Co-PIs.
- v. In case of faculty/academic staff due to retire in the next four years, Co-PI is mandatory for DST proposals, irrespective of the discipline.

vi. All proposals will necessarily be forwarded first by the Head of the Department.

A note in this respect will be circulated to the academic staff of the Institute.

2. Summary of inputs from Golden Jubilee Research Complex (GJRC): The Convener informed IRDC that input from a number of departments, including Chemistry, HSS, IME, BSBE, MME, ME, and CHE and an individual opinion of Dr. Mahendra Verma (on behalf of the *Advanced Mechanics* group) has been received. Along with the summary of all the inputs, it was mentioned that IRDC desires to strongly recommend the GJRC proposal for an in-principle approval from Board of Governors of IIT Kanpur. However, it was suggested that the formation to interdisciplinary research groups across the institute must commence so that the design of the building is linked to the requirement of interdisciplinary research groups. The construction of the building would take another year or more (upon Board's approval). It is important that these groups should start informal interaction and come up with clear thoughts on **complex** research problems of multidisciplinary nature.

The slide presentation on conceptual framework for GJRC was also suggested. While a large funding from MHRD for the proposed GJRC is feasible, it was mentioned that some fraction of such funding can be spared to revamp existing research facilities and laboratory space.

3. **Concept paper on seeking MHRD support:** IRDC Convener informed the committee that inputs on the concept paper seeking MHRD support have been received from BSBE, AE, CHE and MME. The faculty in general expressed very positive opinion on the concept note. It was clarified that the funding of Rs. 500 crores and 200 additional laboratory staff members, as mentioned in the concept paper, is meant for all IITs. Also, a National Advisory Board of MHRD would monitor the expenditure of such funds to bring accountability/transparency.

4. Office Automation software: Mr. Abhishek and his team from Shinsei bank, Japan presented the R&D module of the *Academic Administration System* (**AAS**) on 18^{th} April at the Outreach Center. This presentation was attended by a number of faculty colleagues and a few IRDC members. The team was told that R & D modules should have sufficient compatibility with frequent upgradation depending on the users' newer requirement and satisfy legal issues. IRDC was informed that the ASS model has already been successfully implemented in Shinsei bank, Japan.

Following the presentation, the team also met the Institute officials, including Director, Deputy Director and Dean, R &D. It was suggested to the team that the trial version of the software be run at DORD office for a limited number of projects in parallel with the paper-work. Based on the input from the users, further discussion would be held prior to the implementation of the software. A core team of faculty consisting of Drs. Rajat Moona, Amitabha Bandyopadhyay, Satyaki Roy, B. V. Phani, Deepak Gupta/nominee and Mr. K.V. Satya Murty has been formed to have an effective communication with the AAS software provider as well as to convey specific/detailed requirements of PIs. It is expected that core faculty members will take input from PIs prior to detailed discussions with the software provider.

5. Scheduling of IRDC meetings: It was decided that regular IRDC meeting in the next semester would be usually held on the first Monday (barring MS-I/MS-II/MS Recess and National Holidays) of each month between 5 and 7 pm. However, special IRDC meetings to discuss important agenda items may be called as and when required on other days in a week.

During 2009-2010-I semester, the schedule of regular IRDC meetings, to be held during 5 - 7 pm, is as follows: 3^{rd} August (Mon), 7^{th} September (Mon), 5^{th} October (Mon) and 3^{rd} November (Tue).

6. Issues related to User Charges for CARE and other Institute facilities: IRDC was informed about the arbitrariness of the charges for CARE and other Institute Central facilities. During discussion on this issue for around 45 minutes, it was mentioned that high user charges (in excess of Rs 3,000/- for some) have become bottlenecks for faculty members and researchers, who do not have sponsored projects. A number of IRDC members encouraged rationalization, transparency and priority access/usage to PhD students need to be followed for all the CARE/Institute facilities. Also, faculty members responsible for such facility can be requested to provide justification (mentioning consumable expenses, AMC expenses and/or regular maintenance expenses, manpower) in support of the user charges. DORD announced that CARE funding, in the future, would provide funds for consumables along with the cost of equipment. As on date, Institute R & D account does not have any possibility to provide equipment maintenance support.

IRDC has recommended that PhD students (whose forms have been forwarded by the respective Heads of Departments) should be given priority access with reduced charges. The charges towards the usage by PhD student for each facility should be paid from departmental

budget. This is expected to create sufficient incentive for a rational use of the facility by PhD candidates.

In conclusion, it was decided the user charges need to be reduced and be commensurate with the expense incurred on one hand and availability of resources with the users, on the other. In addition, it was recommended that the scientific details (example, basic principles and technical specifications), availability and the basis of charge computation for CARE equipment be made available on a website. Such a website can provide information on non-CARE facilities as well.

7. Keywords for Project Classification during registration: DORD mentioned the need for project classification for better dissemination of information to the outside world as well as for archival purposes. It was decided the project registration form will be appropriately modified so that PI can mention relevant keywords during project registration as well as write a few lines of abstract (in layman's language – abstract for the tax payer) so that such information can be displayed against each sponsored project.

8. Faculty classification in terms of expertise in broad research areas: After a brief discussion, it was decided that all IRDC members will compile information for the respective department/IDP about their area of expertise (broad, e.g. Energy, Environment, Materials, Simulation, Communication as well as narrow research domains) along with the personal website and email addresses so that such collected information will be useful for wider dissemination. A suitable search engine will use this information in the database to generate responses to queries frequently received from the outside world. The departmental representative in IRDC is requested to follow up. The format is to be circulated by Convener, IRDC.

The meeting ended with vote of thanks to the Chair.

Prepared by Bikramjit Basu IRDC Convener

Prepared on 25th April, 2009 and Revised on 3rd May, 2009



Indian Institute of Technology Kanpur Institute Research and Development Committee

Minutes of the IRDC Meeting held on 27th July, 2009 in FB 212

Members Present: Drs. K. Muralidhar (Chairman), B. Basu (Convener), A. Kushari, A. Agarwal, B. V. Phani, P. Munshi, Deepak Gupta, Utpal Das, Nishith Verma, D. Kundu, Qureshi, Kumar R. Priya, J. Subramaniam (representative of regular scientific/Design staff), Ms. Rashmi Parihar (representative of Project Associates working for sponsored projects), K. V. Satyamurty

1. Announcement: DORD announced that Dr. B V Phani, Co-ordinator, SIIC will make presentation on Intellectual Property related issues as well as on aspects related to recent patent filing at various departments in the institute. IRDC members are requested to convey this to thir respective HOD so that an invitation can be extended to Dr. Phani for making such presentation.

2. Discussion on the Revision of Salary structure for Project staffs: Mr. K. V. Satyamurty presented the document on the proposal related to revision of salary structure before IRDC members. IRDC members deliberated on Mapping of proposed/revised pay scale with the existing pay scale in terms of its rationale, justification, additional privileges (e.g. medical, housing etc.) and insurance. The creations of some new positions as well as the revision of 'work assignment' policy were also discussed.

Based on the inputs from IRDC members, the salary structure as well as the entire document has been revised. The revised document is enclosed herewith.

The meeting ended with vote of thanks to the Chair.

Prepared by Bikramjit Basu IRDC Convener

Prepared on 30th July, 2009



Indian Institute of Technology Kanpur Institute Research and Development Committee

Minutes of the IRDC Meeting held on 3rd August, 2009 in PBCEC

Members Present: Drs. K. Muralidhar (Chairman), B. Basu (Convener), Rajat Moona, Balaji Prakash, A. Agarwal, P. Munshi, Utpal Das, Nishith Verma, D. Kundu, J. Kumar, S. Sangal, S. Qureshi, Kumar R. Priya, K. S. Singh, J. Subramaniam (representative of regular scientific/Design staff), Ms. Rashmi Parihar (representative of Project Associates working for sponsored projects), Mr. K. Sudheendra Rao (representative of PhD students) and Mr. K. V. Satyamurty

Special invitees: Asst. Registrar (Stores & Purchase), Audit Officer, DORD Staffs (Sharda Tiwari, Pradeep Phalke and Surendra Gupta)

1. Announcement: The minutes of July 27 meeting along with the revised document on Project staff salary was ratified. The revised document will now be sent to Director for his approval. IRDC welcomes Mr. K N Dakhale and K G Arvind Kumar as special invitees.

2. Discussion on the Project related Purchases (indigenous and import): DORD made opening remarks on this issue, which concerns a large number of PIs. It was mentioned that the idea of this meeting is to understand the issues related with the delays on several cases of a number of Project purchases, mostly related to imported equipments. Subsequently, IRDC Convener presented some slides related to the existing purchase procedures related to Import and indigenous purchases and it was followed by a detailed discussion over one and half hour. Among many aspects, various aspects related to procedural convenience, smoothness and fastness, import handling agency's performance, and role of office automation were discussed.

Based on the inputs from IRDC members, the following have been recorded:

- 2.1. AR (R&D), Mr. Satya Murty volunteered to develop a user-friendly model price quotation, enquiry letter as well as an integrated indent-cum-purchase form for the use of Indenters. These documents will be discussed among IRDC member prior to finalization.
- 2.2. Once such streamlined documents are followed, IRDC was conveyed that the timescale for issue of purchase order from the date of submission of a purchase indent can be expected to be **six working days** in normal circumstances. AR, R&D explained the role of input services in paper movement, a major factor that affects the efficiency parameters. The role of Public Sector Banking in opening LCs, TTS as well as in providing information on online funds transfers, debits etc. have pointed out. The measures being taken up to persuade the sluggish banking system have also been explained. Partially complete files, incomplete Automation system, loss of time in dock movement in courier system, redundancy in paper movement, lack of professional manpower and frequently changing project staff, statutory obligations, mandatory approvals and committee proceedings are few of the definitive factors besides unforeseen and unprecedented situations that are specific to the cases, it was added. A complete approach to handle these issues in a synergestic manner would be saving at least 50 % of the time loss.
- 2.3. It was observed that the purchase related document goes through same office more than once during the entire procedure. This redundancy can be avoided with some scrutiny and making suitable policy change in this regard.
- 2.4. A number of IRDC members expressed concerns over the problems with freight forwarder.
- 2.5. It was generally agreed upon that the office automation needs to be significantly improved so that PIs can see the status of their purchase document online during various stages. There is also a need to integrate Ingress and Oracle software to make the purchase process efficient and also to ensure immediate commitment of expenditure, which will help in better financial planning by the PI. This is viewed as one of the major weaknesses of the system and requires urgent action by Office Automation. This has been understood to be resulting in issue of UCs and overspending against sanctions for lack of online information on the committed expenditure in the Project Accounts.

- 2.6. A brief document detailing the entire purchase procedure will soon be available and this will be of immense help for the new faculty members. AR. R&D has informed the floor that he has been working on development of a comprehensive R&D manual first of its kind in the R&D system of IIT Kanpur, which will cover all the aspects of the R&D management.
- 2.7. It was mentioned by Audit officer that handwritten receipts will be allowed in the interim period, when the computer generated receipts are not available. It was clearly mentioned that many city-based small shops, providing us small equipment accessories, do not have adequate computer infrastructure.
- 2.8. Also, in order to maintain smoothness as well as to check whether various purchases are entered into stock registrar, it was suggested that Audit office staff members can make occasional visits to various departments/labs.
- 2.9. The electronic approval for the committees for the appointment of project staffs as well as purchase will be followed. The e-approval for travel from projects has been already been implemented and is currently followed by PIs. The AR (R&D) has shown considerable enthusiasm for e-approval and conveyed that parallel automation system developed by R&D office for e-approvals and requests shall be made available within a months time. A separate notification with detailed guidelines shall be issued once the system is ready. This is expected to be ready by September 15, 2009.
- 2.10. The softcopy of all the R &D related forms will soon be available in MS-WORD format. Once available, only hardcopies of the electronically filled forms (NOT handwritten forms) will therefore be accepted at DORD office.
- 2.11. Based on the entire discussion, the purchase flow charts will be modified in a separate meeting between Stores, R&D, Audit and Finance wing of the Institute and be put up for the consideration of the IRDC at its next meeting.
- 2.12. It was also suggested that the Stores & Purchase Wing, R&D Office and the Internal Audit wings have to work coherently to make the entire purchase procedure more fast and smooth so that system be strengthened.
- 2.13. The performance of import handling agency will be periodically reviewed by the incharge, Stores and Purchase. A number of examples were cited to reveal the lacuna in the performance of those agencies.

2.14. The members have also quoted the examples of completing the entire purchase process within a couple of days which is appreciable and visualized as the most idealistic situation. However, the realistic situations always overpower the processes which are to be controlled appropriately.

The meeting ended with vote of thanks to the Chair and with special thanks to all the special invitees.

Prepared by

Bikramjit Basu IRDC Convener

Prepared on 12th August, 2009



Minutes of the IRDC Meeting held on 7th September and adjourned meeting held on 11th September, 2009 in PBCEC

Members Present on 7th *September*: Drs. K. Muralidhar (Chairman), B. Basu (Convener), Balaji Prakash, A. Agarwal, P. Munshi, Utpal Das, Nishith Verma, Sandeep Verma, Harish Karnick, D. Kundu, S. Qureshi, Kumar R. Priya, Abhijit kushari, V.N. Kulkarni, Anoop Singh, B. V. Phani, S. Dhamodaran, Sudeep Bhattacharya, S.A. Ramakrishna, J. Ram Kumar, P. Kulsherashtha, P.M. Prasad, Tarun Gupta, Rajiv Sinha, D. Paul, J. Subramaniam (representative of scientific/design staff), Rashmi Parihar (representative of Project Associates), K. Sudheendra Rao (representative of PhD students), K. V. Satya Murty.

Members Present on 11th September: Drs. K. Muralidhar (Chairman), B. Basu (Convener), Balaji Prakash, A. Agarwal, P. Munshi, Utpal Das, Nishith Verma, Sandeep Verma, D. Kundu, J. Kumar, S. Sangal, Abhijit Kushari, V.N. Kulkarni, Anoop singh, B.V. Phani, Deepak Gupta, Tarun Gupta, M.K. Verma, P. Kulserastha, Rajiv Sinha, D. Paul, P.M. Prasad, Ishan Sharma, J. Subramaniam (representative of scientific/design staff), Ms. Rashmi Parihar (representative of Project Associates), K. Sudheendra Rao (representative of PhD students).

- 1. Announcement: The minutes of the meeting on 3rd August were ratified. DORD announced the launching of the second phase of the project on Autonomous vehicles by Boeing. It was mentioned that around 15 undergraduate students are participating in the second phase. IRDC appreciates the participation of undergraduate students in various research projects across the institute. DORD also announced IIT Kanpur's recent initiative on solar energy being coordinated by Dr. Monica Katiyar.
- 2. Discussion on the Model Indent-cum-Purchase forms (indigenous and import): Based on IRDC's recommendation, the model Indent-cum-Purchase form was placed before the members for further discussion. Mr. Satya Murty took input from all members. Some suggestions include a) mentioning currency, b) including 'Additional information', c) certification from agent on a statement related to agency commission. Based on all inputs, the model indent form will be revised and implemented so that purchase orders can be comfortably processed.

3. Discussion on proposal - 'Ion Beam Center for Science and Futuristic Technologies': Dr. V. N. Kulkarni and his team presented their proposal on Ion beam Center. A number of faculty members from Physics and one faculty member from Mechanical Engineering are involved in this concept. The formation of such center is expected to encourage intense interdisciplinary activities in the area of Photonic and device materials, MEMS and NEMS for space and energy related applications. The expansion plans of the existing Ion Beam facilities were discussed. This proposal was placed before IRDC to increase the awareness of the large research activities being pursued with the existing facilities of Ion Beam Complex. IRDC members were quite enthusiastic about the creation of an Ion Beam Center at the Institute.

4. Discussion on Proposal - Center for Earth Systems and Climate Change Research: Dr. Rajiv Sinha presented several focused research areas related to Climate Change and Earth Sciences. Around 19 faculty members across various Engineering disciplines (CSE, EE, ME, Civil, ChE), sciences (Chemistry, Physics) and Humanities and Social Sciences are presently involved in this important area. Currently, only two centers, one at Indian Institute of Tropical Meteorology (IITM), Pune and the other one at IISc, Bangalore are actively involved in studying climate changes. It is expected that IIT Kanpur can take a lead in this area with the formation of such a interdisciplinary group. It was mentioned that this center is involved in research activities, which will be complimentary to the existing activities of Center for Environmental Sciences and Engineering. After a detailed discussion lasting over one hour, IRDC overwhelmingly expressed appreciation and recommended that the proposal has the potential to form an interdisciplinary Centre on climate change research.

The meeting ended with vote of thanks to the Chair and with special thanks to the special invitees.

Prepared by

Bikramjit Basu IRDC Convener

Forwarded

K. Muralidhar

Dean: Research and Development

Prepared on 19th September, 2009 and Ratified on 22nd September, 2009



Indian Institute of Technology Kanpur Institute Research and Development Committee

Minutes of the IRDC Meeting held on 22nd September (Tuesday) at 5:30 pm in PBCEC

Members Present: Drs. K. Muralidhar (Chairman), B. Basu (Convener), Nishith Verma, Kumar R. Priya, A. Agarwal, Anoop Singh, B.V. Phani, Jitendra Kumar, K. V. Satya Murty Special invitee: Mr. Rajeev Garg, SE, IWD and Mrs. Avanti Joshi

At the beginning of the meeting, DORD welcomed Mr. Rajeev Garg as a special invitee to IRDC meeting. The minutes of IRDC meeting held on 7th September, 2009 were ratified. And the softcopy of the proposal and presentation files are now available at the weblink: http://www.iitk.ac.in/dord/research_centers.htm.

- Presentation by SE, IWD on research labs: SE, IWD, presented IWD's long track record of accomplishments in terms of creating large research facilities, like NWTF, Nanoscience initiative (Four clean rooms - class 10,000 and class 1000), Center for Environmental Science and Engineering (rated as five star by TERI), Helicopter building, renovation of existing chemistry labs, liquid helium plant, Engine research Lab, Energy Conversion Lab, 4i Lab, Transportation Engineering Lab and lately, the Microfabrication Lab. After a detailed discussion over close to an hour, the following points emerged:
 - Safety issue related to gas cylinders, Chemical disposal, Computer peripherals etc. are major concerns. IRDC opined that there is a need for safety officer on the campus to monitor the laboratory safety issues. This becomes increasingly important in the present time scale as a number of large scale equipments are currently available in the campus and this will be in the greater interests of the researchers and students.
 - Bio-ethics committee needs to be formed as per requirement of Department of Biotechnology.
 - Leakage problem frequently causing partial/full damage to research equipments and the solution can be the use of a transformer.
 - Any request for lab maintenance related work needs to be forwarded by HOD.

- Discussion on R & D document R & D document was presented by convener, IRDC. IRDC appreciated the contribution of Mrs. Joshi, Mr. Satya Murty and staff members of DORD Office for coming up with such a comprehensive document. Specific comments recorded are:
 - **a.** A slim version of the document that summarizes major points is desirable.
 - **b.** An index is to be prepared.
 - c. (Soft-version) Contents should be linked to the respective chapters by hyperlinks.
 - **d.** Administrative structure of the Institute needs to be included.
 - e. A section on how the new faculty can create and operate projects is required.
 - **f.** Reference to FIST should be reconsidered.

Mrs. Joshi was requested to revise the document in the light of the suggested changes. The revised document will be discussed at departmental level before further discussion in IRDC.

3. **Any other matter**: With Dr Bikramjit Basu's term coming to an end, a new convener of IRDC is to be chosen. Accordingly, the following committee, constituted to seek nominations and conduct elections (if required) for the next convener, is requested to identify the person at the earliest.

Dr Nishith Verma, Chemical Engineering Dr B.V. Phani, IME Dr A.K. Agarwal, Mechanical Engineering (convener)

Prepared by

Bikramjit Basu IRDC Convener

Forwarded

K. Muralidhar Dean: Research and Development

Prepared on 23rd September, 2009



Indian Institute of Technology Kanpur Institute Research and Development Committee

Minutes of the IRDC Meeting held on 27th October, 2009 in FB 212 at 5 pm

Members Present: Drs. K. Muralidhar (Chairman), B. Basu (Convener), Nishith Verma, Safi Qureshi, Kumar R. Priya, D. Kundu, A. Kushari, A. Agarwal, B. V. Phani, Utpal Das, Ashish Garg, Mr. K. Sudheendra Rao, Dr. J. Subramaniam (representative of regular scientific/Design staff), Ms. Rashmi Parihar (representative of Project Associates working for sponsored projects), Mr. K. V. Satya Murty

1. Announcement: DORD made the following announcements:

- a) Institute sponsored research scheme is approved by the Board and a few research proposals submitted by our colleagues are under active consideration.
- b) DST approved High Performance computing project of Rs. 13.8 crores and all the workstations will be housed in the computer center.
- c) Golden Jubilee REACH conference will be held at IIT Kanpur, tentatively during Feb.– Mar., 2010.
- d) NPTEL Phase II project of Rs. 10 crores over next two years is sanctioned.
- e) The project on Virtual labs of Rs. 20 crores is in the final stage of approval.
- f) NWTF received large funding from Boeing, USA.

2. Terminal report of IRDC - presentation by the outgoing Convener: Dr. Basu presented the executive summary as well as details of the decisions/recommendations made by IRDC during 2008-09. While presenting the terminal report, IRDC was updated with the following information:

- a) E-advance at DORD online portal is launched and when found error free, will be announced formally to the academic staff. PIs can use E-advance for TA/Cons./Cont. purchases.
- b) IRDC requested Dr. Phani to take up the initiative of developing an Academic Administration Software (AAS) on an urgent basis.

- c) Safety exit should be made available in research labs.
- d) Safety awareness program can be arranged for the laboratory staff.
- e) Intellectual Ventures may make presentation to IRDC. Departments should invite Dr. Phani for discussion on new initiatives of SIIC and activities related to IPR, Patent, and faculty entrepreneurship.

IRDC members specially congratulated Dr Bikramjit Basu for his commitment and interest in fulfilling his responsibilities.

3. Election of New Convener: IRDC elected Dr(s). Nishith Verma as convener and Abhijit Kushari as co-convener of IRDC for the period of October 2009 – September 2010.

The meeting ended with vote of thanks to the Chair.

Prepared by

Bikramjit Basu IRDC Convener

> Forwarded K. Muralidhar Dean: R & D

Prepared on 28th October 2009

Minutes of the IRDC meeting held on 7th January 2010 at 4 PM in FB-212

Members Present: Drs. K. Muralidhar (Chairman), N. Verma (Convener), A. Kushari (coconvener) B. Basu, S. Qureshi, B.V. Phani, Utpal Das, Avinash K. Agarwal, Mr. K.V. Satya Murty, Mr. Arvind Kumar (special invitee)

- 1. Convener welcomed all IRDC members to the meeting.
- 2. The minutes of the IRDC meeting held on October 28, 2009 was confirmed.
- 3. The slim version of the R&D manual was presented and approved.
- 4. The list of the contents for the full version was briefly discussed. The members were informed that the full version is currently under review at the R&D office and will be sent to all IRDC members in the next couple of weeks. Once available, the members were requested to circulate the same amongst the departmental faculty and send their feedback to the Convenor IRDC within a month. Any specific concern and comment may be discussed in the following IRDC meeting.
- 5. *Employment through work-assignment*: The convener presented the topic for discussion. The members were informed that in the last few years, the number of research and consultancy projects has considerably increased. So have the project grants and the number of project employees. It was pointed out that those who are employed on minimum wages or a consolidated salary with less than 6500/- per month need to be paid EPF and ESI as a statutory requirement.

Currently there is a large number of persons (skilled or semi-skilled) employed on various projects in the Institute through the work-assignment. As per the GOI norms, the persons employed in such category, either part or full time, are entitled for benefits under EPF and ESI. The DR-Audit categorically informed the members that this rule has to be followed in both spirit and letter to avoid any legal or humanitarian consequences that may ensue. The members agreed with the principle.

To this end, the AR (R&D) informed the members that R&D office has worked out on a plan to implement the aforesaid rule. The plan, shortly to be in place (before March 2010), will allow the PIs to hire person or persons (skilled or semiskilled) on a project, through the route of Cooperative man power supply agencies. While the payment of the statutory amounts towards EPF and ESI will be made from the respective projects, the modus operandi as envisaged in the proposed plan, will fully guarantee the interest of the person(s) on hire through the manpower agencies recognized through empanelment. In essence, the R&D office will be the nodal agency working between the PI and the empanelled agency ensuring that the EPF and ESI amounts are deposited. The payment of the wages will be made to the employees on work assignment by handing over the salary cheque by the agency drawn in the name of the employee on work assignment, through the PI, who in turn will endorse it for payment by the bank. However, a maximum of 5% commission will be offered to the agency on the salary component towards service charges.

The members discussed several aspects of the proposed plan, in particular, the empanelment versus the apprehension of the exploitation of the employees by the contractor, and expressed satisfaction over the proposed plan. The details are currently under preparation and will be brought to IRDC latest by 31st March 2010. Till that time, the current procedure of taking an advance and making payments against a receipt will continue.

When the new procedure of hiring staff through empanelment is implemented, an independent method of direct payment for specific (and occasional) tasks will be introduced. Examples of such tasks include overhauling compressors, washing curtains, and repairing furniture.

The committee thanked DR (audit) for sparing his valuable time for discussions.

6. *Any other matter*: The poor attendance of the IRDC members was noted. All members were requested to impress upon their faculty colleagues the importance of discussions and deliberation in the IRDC meeting for the smooth and successful implementation of research projects at the Institute.

Prepared by

Uneve

Nishith Verma Convener-IRDC

K Muralidhar

K. Muralidhar Dean: R&D

Minutes of the IRDC meeting held on February 1, 2010

Members Present: Drs. K. Muralidhar (Chairman), N. Verma (Convener), A. Kushari (coconvener) B. Basu, S. Qureshi, B.V. Phani, Utpal Das, Avinash K. Agarwal, Anoop Singh, Jamuna Subramaniam, A. Bandopadhya, Dhirendra Kattai, S. Ghorai, P. Munshi, Deepak Gupta, Rashmi Parihar, S. Rao, S. Verma, N. Tiwari, Mr. K. Ravi Priya, Mr. K.V. Satya Murty

- 1. Convener welcomed all IRDC members to the meeting.
- 2. The minutes of the IRDC meeting held on January 7, 2010 were confirmed.
- 3. The members were informed that the soft copy of the full version of the R&D manual has been circulated by email. The same is also uploaded on the website of the R&D office at the link, <u>http://www.iitk.ac.in/dord/R&D_%20manual.pdf</u>. The members were requested to circulate the same amongst the departmental faculty and send their feedback to the Convener IRDC within a month.
- 4. Convener informed the members that a draft of plagiarism policy prepared by Prof. B. Phani, SIDBI has also been circulated by email. The contents of the draft are for the general information only, for example, the common definition of plagiarism in academics, procedures to check it, and a few case-studies.
- 5. Closure of discussions on Employment through work-assignment: The convener informed all the members that effective April 1, 2010, the new procedure of hiring persons via manpower agencies recognized through empanelment will be in place and the current procedure of employment through work-assignment will be terminated. Dean, R&D office will shortly issue an office order in this respect. All members were categorically requested to inform their departmental faculty colleagues about the termination of the existing procedure and implementation of the new procedure effective April 1, 2010. With this, the reply to the specific queries of some of the faculty received through email to the Convener was taken up by KVSM. KVSM also clarified some additional matters pertaining to employment through empanelment. In essence, it was clarified that
 - (1) The modus operandi is the same as outlined in the previous minutes of meeting (January 1, 2010)
 - (2) PI has complete flexibility and freedom of hiring any person of his or her choice and the required administrative paper-works are minimal. R&D office will have a nodal desk and person-in-charge to assist the job.
 - (3) EPF and ESI will be paid to the Labor Commissioner office on the salary component of the hired person, and the amount will be deducted directly from the project grant.

- (4) The commission to the empanelled agency will be limited to maximum of 5% of the salary component and periodically reviewed by R&D office.
- (5) No EPF or ESI deduction will be made if the salary exceeds Rs. 6600 per month.
- (6) EPF and ESI are also applicable to the person if hired part-time.
- (7) The payment of the wages will be made to the employees by handing over the salary cheque by the agency drawn in the name of the employee, through the PI, who in turn will endorse it for payment by the bank.

It was also re-iterated that when the new procedure of hiring staff through empanelment is implemented (*as in the methodology attached below*), an independent method of direct payment for specific (and occasional) tasks will be introduced. Examples of such tasks include overhauling compressors, washing curtains, and repairing furniture.

The members expressed satisfaction on the upcoming new procedure of hiring through empanelment.

6. Dr J Ramkumar, In-charge SPO presented the current placement scenario of the graduating students. While the members were reasonably satisfied with the present status of the job placements to the undergraduate students, the picture for the M. Tech students was, however, found to be dismal, in most of the departments. Dr. Ramkumar proposed the plan of absorbing the students, who are not yet placed, on the various research projects within the institutes, especially the large projects and programs. For this, it was proposed that PIs should formally make a presentation of their current projects to the graduating students, very similar to the current practice of pre-placement talks adopted by the hiring companies on the campus. This way, there is a likelihood of motivating our students to seriously consider working on the R&D projects within the institute, as an alternate career option.

The members had varying opinions on the proposed plan. However, it was suggested that when the current season of placement ends sometime in May-June, the plan should be revisited for consideration. Dean, R&D offered assistance in this matter to the SPO for providing a link to the list of available projects with PIs. The members thanked Dr. Ramkumar for updating them with the current placement scenario and for the proposed plan of employment on the projects to the graduating students.

7. Dr. Dhirendra Katti, Warden-RA hostels presented the current status and requirement of RA hostels. Everyone unanimously agreed that due to ever increasing projects, the number of research staffs have considerably increased over the past few years and as a consequence, a significant number of the staffs do not find accommodation on the campus and quite a few of them have to share accommodation.

Dr. Katti also presented the outline of the new multi-storied RA hostel, which is likely to be completed in the middle of the next year, 2011, behind the swimming pool and next to the present RA hostel. It was felt that despite the availability of 200 single-rooms and 36 double-rooms in this new upcoming RA hostel, there will be significant requirements of additional rooms for the project employees in the coming years. To alleviate the situation, Dr Katti suggested

- (1) To make a contingency plan that can provide for the growth in number of RA until the new building is ready for occupancy.
- (2) To make a new plan for new accommodation for project related appointments at multiple levels (i.e. Type 2 type accommodation for married project employees that are relatively senior in designation as well as age such as DST-Young Scientist and Sr. Proj. Engineer; SBRA type accommodation for married project employees such as post-doctoral fellows, project engineers etc.; and studio apartment type accommodation for single post-doctoral fellows, project engineers or Sr. project associates etc.).

All members supported the suggestions and requested the Dean, R&D to present the same to the Institute for implementation.

8. Dr. Nachiketa Tiwari, Coordinator-4i Lab presented the current roles, objectivities and capabilities of the lab. Due to paucity of time, the presentation was short. The members present were happy to learn the existing capability of the lab through some of the state-of-the-art available machines. It was suggested by one of the members that large number of students should be encouraged to make use of the existing tools through B. Tech/M. Tech projects under the guidance of their thesis supervisor. It was also suggested that the outside companies may be permitted to collaborate with the Institute and use the facility. Dr. Tiwari was requested to continue presentation of the item in the next IRDC meeting.

Prepared by

evens

Nishith Verma Convener-IRDC

K Muralidhar

K. Muralidhar Dean: R&D

Methodology for Work Assignment through Manpower Agency

- 1) Manpower agencies empanelled for providing manpower on work contract basis will be notified through the website from time to time. The details of the daily wage rates payable as per the GoI norms will also be given. This information will be for the information of the PIs.
- 2) The present rates of gross daily wages, net daily wages, ESI, EPF (employee and employer contributions) and the 5% agency commission as on date are made available in the enclosed table.
- 3) A software module through automation will be made available for sending the requests for engaging manpower through the agency which will be confirmed online. The list of confirmations will be sent to the manpower agency with the names of the workers engaged by the PIs and the details of salary payable to them for a period of 26 days in each month as per GoI rates. [Remark: If the consolidated salary paid through work assignment is above Rs. 6500/- per month, EPF need not be paid separately. This rule may change from time to time.]
- 4) The agency shall arrange to get the IDs from ESI/EPF Commissions for depositing the contributions on monthly basis.
- 5) The agency shall handover a cheque towards net salary payable to the worker directly to the respective PIs before 5th of every month. The cheque details have to be notified by the PI to the R&D office through the automation software. This will enable the office to release payment against the agency's salary bill.
- 6) DoRD office shall prepare individual cheques in favor of Commissioner, ESI and EPF towards appropriate contributions. One cheque shall be issued to the agency towards the cost of the salary and 5% agency commission. No service Tax is admissible on the bills produced by the agencies, since the cooperative manpower agencies do not pay any service tax.

Avera

Nishith Verma Convener-IRDC

Minutes of the IRDC meeting held on March 11, 2010

Members Present: Drs. K. Muralidhar (Chairman), N. Verma (Convener), A. Kushari (coconvener) B. Basu, D. Kundu, S. Qureshi, T. Prabhakar, V. N. Kulkarni, D. Philip (in place of B. Phani), Utpal Das, Avinash K. Agarwal, Jonaki Sen (in place for A. Bandyopadhyay), A. Subramaniam (in place of A. Garg), Sandeep Verma, N. Tiwari, Miss Rashmi Parihar, and Mr. K. S. Rao.

- 1. Convener welcomed all IRDC members to the meeting.
- 2. The minutes of the IRDC meeting held on February 1, 2010 were confirmed.
- 3. Dean, R&D announced that effective April 1, 2010, the new procedure of hiring persons via manpower agencies recognized through empanelment will be in place and the current procedure of employment through work-assignment will be terminated. Dean, R&D office has already issued an office order in this respect. Dean, R&D once again emphasized that PI has complete flexibility and freedom of hiring any person of his or her choice and the required administrative paperworks are minimal. Most importantly, there is no such issue of exploitation of the hiring workers under the new scheme. Any incident, if it arises in the future, will be carefully addressed by R&D office.

Dean, R&D also announced that the foundation of the six-storied New-New-RAhostel will be laid in the first week of April, 2010 and all IRDC members were invited to grace the ground breaking foundation ceremony. The hostel will be ready for allotment in the middle of the next year, 2011.

4. Dr. Bikramjit Basu informed the IRDC members about the recent initiative on Global Innovation and Technology Alliance (GITA). At present, GITA is operational to facilitate collaboration between companies of India and Canada with future plans of including academic institutes as partners. Dr. Basu suggested that a few action plans may be initiated at IIT Kanpur to further nurture and build up strong networking among IITs and Indian industries under GITA. For example, large interdisciplinary research with involvement of companies in the area of Design and Development of Products and Solutions should be taken up. Similarly, modalities for IIT faculty members to spend their sabbatical at various Indian industries and to attract company executives to work as visiting professor at IITs should also be developed.

The IRDC members enthusiastically supported the idea and requested Dr. Basu to present a comprehensive proposal on the subject in the future meetings.

5. Dr. Nachiketa Tiwari continued with the presentation left over from the previous IRDC meeting, on the current roles, objectivities and capabilities of the 4-I Lab. The members present were happy to learn the existing capability of the Lab

through some of the state-of-the-art machines and equipment. Dr. Tiwari was requested to update the webpage of the Lab giving in the details of the existing projects, available machines, and the recent products developed. It was also suggested that an advisory committee be constituted to assist the smooth functioning of the Lab.

- 6. *Initiation Grant* (Policy matter): The IRDC members had detailed discussions on the existing procedure of providing initiation grant to the new faculty. All IRDC members appreciated that the initiation grant is indeed useful to the new faculty during his or her initial period of research activities in the Institute. However, the procedure of providing the initiation grant be revisited. A majority of the IRDC members suggested that the following points be put up to the Institute for implementation:
 - a. The maximum limit of the initiation grant should be increased to Rs. 20 lacs from the existing Rs. 10 lacs, since there has been a significant increase in the cost of consumable and non-consumable items over the last five years.
 - b. *Proposal:* Institute prescribes certain guidelines (for example, the maximum amount that can be spent on travel (national or international), contingency, equipment, etc) for the initiation grant, based on which 1-2 page proposal is prepared by the new faculty. If the amount envisaged in the proposal is Rs. 10 lacs or less, there is no need of presentation of the proposal by the faculty before an evaluation committee, and the grant is automatically approved. If the amount exceeds Rs. 10 lacs, the faculty may be asked to provide a detailed proposal and give a presentation. Majority of the IRDC members were of the opinion that such initiation grant scheme, if implemented, will have potential of attracting more new good faculty to the Institute.

It was also suggested that the existing evaluation committee of Dean (R&D), DOFA, and Dean (DRGP) be expanded to include HOD, and two expert members across the institute, whose names would be proposed by the incoming faculty.

- c. *Staff:* It was also suggested that certain amount in the grant may be budgeted for hiring of the project employees.
- 7. Research support for consumables and maintenance of equipment on a need basis (feedback received from BSBE): Owing to shortage of time, this item was deferred for discussion in the next meeting.
- 8. *Care Equipment* (Policy matter): Most of the IRDC members opined that the current procedure for providing grants for equipment under the Care scheme be continued. However, it was suggested that if a faculty desires to seek the reasons for which his or her proposal was not approved, the Care evaluation committee must provide the same to the faculty.

It was also suggested that a list of all equipment procured through Care should be provided on the R&D webpage, giving in all details, including the name, technical specifications, and features of the equipment, the respective contact person, and the percentage utility as well as the output (data) of the equipment.

Prepared by

Avena

Nishith Verma Convener-IRDC

K Muralidhar

Minutes of the IRDC meeting held on April 13, 2010

Members Present: Drs. K. Muralidhar (Chairman), N. Verma (Convener), A. Kushari (coconvener) B. Basu, D. Kundu, S. Qureshi, V. N. Kulkarni, D. Philip (in place of B. Phani), Utpal Das, Avinash K. Agarwal, Jonaki Sen, A. Bandyopadhyay, A. Garg, Sandeep Verma, Kumar Ravi Priya, Satyaki Roy, Deepak Gupta, J. Subramaniam, B. Lohani, Ms Rashmi Parihar, Mr. K. S. Rao, and Mr. K.V. Satya Murty

- 1. Convener welcomed all IRDC members to the meeting.
- 2. The minutes of the IRDC meeting held on March 11, 2010 were confirmed.
- 3. Dean, R&D announced that effective April 1, 2010, the new procedure of hiring persons via manpower agencies recognized through empanelment is in place and the current procedure of employment through work-assignment has been terminated. A new on-line software package to professionally handle the Work Assignment through Agency system is now available on the R&D webpage.

Dean, R&D also announced that the foundation of the six-storied RA-hostel was laid on April 12, 2010. The hostel having 255 rooms should be ready for allotment in the middle of the next year, 2011.

32 units of Type-I houses have also been made available to the R&D office for the allotment to research personnel (e.g. RAs).

Mr. K.V. Satya Murty, Asst. Register will be leaving IIT Kanpur to join IISER, Bhopal around the middle of April, 2010. Mr. R. K. Sachan has joined in his place. The exemplary service of Mr. Murty was appreciated by all IRDC members and put on record.

4. Dr. Bharat Lohani gave a presentation of the 3D Virtual Model of the IIT Kanpur campus. All members were happy to note the capability and several features of the model, especially in the animated 3D virtual mapping of the campus, which includes the buildings, streets, and landscapes. It was felt that such software will help the prospective faculty and students, as well as the visitors to the campus, say, during conferences, in locating various buildings within the campus. The members appreciated the effort of Dr. Lohani and his team in creating such package and suggested a number of improvements, including the incorporation of sound effects in the VIDEO. Dr. Lohani sought for additional suggestions across the departments. The IRDC members thanked Dr. Lohani for his time and effort. A sample video can be seen at

http://www.youtube.com/watch?v=jUA8gHYP7to

5. Dr. Bikramjit Basu gave a presentation on the proposal for a *Research Complex*. Dean, R&D assisted in the presentation to inform the members about the reason for re-visiting the presentation.

The members were informed that the proposal for constructing the aforesaid complex was envisaged last year, when the institute was hoping to receive a substantial grant from the MHRD on the occasion of the 50th anniversary of the Institute. The main purpose of having such a significant complex was to create well-endowed laboratory space that can be given on demand for conducting inter-disciplinary research projects. It is envisaged that the research complex would have a collection of research personnel, and basic infrastructure and equipments, a working environment very much similar in spirit to the Lawrence Berkeley Laboratory at the University of California and Argonne National Laboratory at the University of Chicago.

Dean, R&D, further informed that despite a delay in the sanction of funds, it is highly desirable to mark the *research & development* space in the Master Plan so that future construction is possible when the initiative materializes. In this respect, the R&D office (and IRDC) will give a presentation to the Institute Space Committee about the requirement of space for such a complex.

All IRDC members enthusiastically supported the idea. It was unanimously recommended that laboratory space equivalent of $30,000 \text{ m}^2$ be clearly marked in the master plan. A possible site could be near the air strip, though verticality of the construction would be essential.

IRDC members cautioned that a comprehensive and careful planning is required for conceiving the vision, architecture and construction of the building. An Institute vision on future research directions would be necessarily required. At the time of working put the details of the construction, the matter should again be brought to the IRDC for discussions and collective feedback from the Departments and programs be solicited.

6. Dr. Amitabha Bandyopadhyay, BSBE gave a presentation on the proposed research support from the Institute for consumables and maintenance of equipment on a need basis.

It was pointed out that more and more faculty colleagues are undertaking sponsored research projects that are timely, important and interesting. Research activity almost invariably requires some funding for equipment, personnel, consumables, and maintenance of the equipment. Most PIs raise the funding for these activities from extra-mural sources. It is conceivable that for reasons beyond the control of the administration, principal investigator(s) or researchers, funding from extra-mural sources may not always arrive in time of need. It is also possible that for a particular short span of time, a particular investigator may not be able to attract extra-mural funding for a certain activity. In either case, discontinuity in funding even for a short span may have catastrophic consequences both in the short and the long term. Another particularly difficult scenario arises when equipment breaks down for which one may not have a back-up. This situation causes loss of precious time for the students, researchers and the PI.

Therefore, this is to propose that a flexible spending account be created to provide support to PIs and mitigate contingencies arising out of situations that makes, financially, conducting research impossible for a specific period of time. The quantum of the support should be adequate to help the PI tide over the difficult period.

The IRDC members appreciated the proposal. It was suggested that the Institute should also create a cadre of highly qualified research personnel paid from R&D funds who could be assigned to large collaborative projects. For implementation of such a proposal, it was decided to constitute a committee, consisting of Dr. Amitabha Bandyopadhyay as convener, and Drs. Sandeep Verma, CHM and Avinash Agarwal, ME as the other members. The committee was requested to prepare a one-two page proposal outlining the objectives and the rules for the implementation of the proposal. The document will require the approval of the Director.

7. Continuing further discussions in the meeting on the current existing research infrastructures in the Institute, it was also decided to constitute a committee with Dr. Ashish Garg, MME, as the convener, to prepare a document focusing on the theme *Institute Infrastructure and Facilities: Status, Prospects and Possibilities.* A brochure on the collection of equipment available at the Institute on date can be prepared. Dr. Garg, in consultation with the IRDC conveners may nominate the other members of the committee to include the faculty across various disciplines and programs, and submit the document to the IRDC for further discussions.

Prepared by

Anene

Nishith Verma Convener-IRDC

Forwarded by

K Muralidhar

Dean: R&D

23rd April 2010

Minutes of the Special IRDC meeting held on August 19, 2010

Members Present: Drs. K. Muralidhar (Chairman), N. Verma (Convener), A. Kushari (coconvenor), B. Basu, D. Bahuguna, S. Qureshi, S. Banerjee, D. Philip, Utpal Das, Avinash K. Agarwal, A. Bandyopadhyay, A. Garg, S. Tripathi, Sandeep Verma, Kumar Ravi Priya, Satyajit Banerjee, Deepak Gupta, J. Subramaniam, Ms Rashmi Parihar, Mr. K. S. Rao, and Dr. R.K. Sachan, DR (R&D).

- 1. Convener welcomed all IRDC members, including new members, to the meeting.
- 2. The minutes of the IRDC meeting held on April 13, 2010 were confirmed.
- 3. Dean, R&D announced that 32 units (beds) of Type-I houses have been made available to the R&D office for the allotment to project personnel.
- 4. Dr. Dhirendra Katti, Warden-RA Hostel informed the members that the number of project research employees seeking hostels on the campus continues to increase. Although, present waiting period for the allotment of RA hostels is not long (less than a month), the situation in future may become a matter of concern. It was decided that till upcoming RA hostel is ready for allotment (sometime towards the end of next year, 2011), R&D office may explore temporarily renting a few houses or flats in the neighborhood. The officer-in-charge, R&D office assured the members that he will look into such possibility.

It was also agreed upon that those research employees hailing from the places outside the State of U.P. will be given priority in the allotment of rooms in the RA hostel. It was also suggested that those who live within the city of Kanpur but have to commute more than an hour to reach the Institute will also be given priority. As always, female employees would be given preference to the extent possible.

Regarding request from registered students, it was proposed that the Warden of RA hostels would make discretionary, short-term allotments where necessary.

5. The IRDC members welcomed and invited the Director to address three finance-related matters.

Initiation grant

The Director informed the members that the Finance Committee of the BOG rejected the recent proposal of IRDC for increasing the maximum limit of ten lacs currently in practice to twenty lacs.

The Director informed the members that the Institute will consider proposals from new faculty seeking relatively larger amount of grant (much in excess of ten lacs). In such a case, the proposal would be peer-reviewed internationally. An Institute level committee would then examine the proposal and the referee comments and arrive at an overall recommendation. The Director also agreed upon the expansion of the present review committee to include the concerned HOD and a nominee from the list of threefour names suggested by the faculty.

Transfer of Institute's M. Tech/Ph.D. scholarship grant to PI

The Director appreciated the development that faculty members conduct research through projects. He suggested that the graduate students should in fact be appointed on these projects so that they appreciate the context in which the work is being conducted. In addition, he felt that the money paid to graduate students as fellowship should, in some form be available to the PIs for meeting expenses on project work.

Director has suggested that if a PI financially supports from project an M. Tech or a Ph.D. student towards his or her thesis topic, the monetary savings accrued to the Institute may be transferred or allocated for the development activities of the respective PIs. The officer-in-charge, R&D office will work out the modality of transfer, in consultation with the Audit.

Interim research support

The Director welcomed the idea of providing such a support to PIs during the *dry-period* (no projects in hand or inadequate funding). However, he wanted IRDC to identify a list of thrust areas of research for the next five years. The Institute would be willing to support PIs working on the projects covered in the thrust areas. In this respect, the IRDC would discuss the matter and prepare a vision document identifying thrust areas for the next ten years.

Director has also mooted the idea of forming a <u>Research Council</u> consisting of internal members as well as international experts from various disciplines. The council will report to and advise the BOG on matters related to the R&D.

One of the IRDC members raised concern that currently, the Institute infrastructure especially that of ACMS requires immediate attention. While responding that the Institute has several success stories, the Director wanted IRDC to invite the Head, ACMS to give a presentation on its current available facilities and capabilities. Based on the presentation and discussion, IRDC would suggest improvements to the Director for the functioning of the Center.

The conveners of IRDC thanked the Director for his time and valuable suggestions.

Prepared by

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Nishith Verma Convener-IRDC

K Muralidhar

Dean: R&D

Minutes of the IRDC meeting held on September 14, 2010

Members Present: Drs. K. Muralidhar (Chairman), N. Verma (Convener), A. Kushari (coconvenor), M. Sharma, B. Basu, S. Banerjee, T.V. Prabhakar, B.V. Phani, D. Philip, Utpal Das, Avinash K. Agarwal, A. Bandyopadhyay, A. Garg, S.N. Tripathi, Sandeep Verma, Kumar Ravi Priya, Satyajit Banerjee, J. Subramaniam, Ms. Rashmi Parihar, Mr. K. S. Rao, Dr(s) Siddhartha Panda (special invitee), Ashok Kumar (special invitee), Raj Ganesh Pala (special invitee).

- 1. Convener welcomed all IRDC members, including special invitees, to the meeting.
- 2. Dean, R&D informed the members that further to the Director's suggestion, the IRDC will deliberate and identify a few thrust areas which the Institute will like to additionally support. This matter will come up for discussion in the next IRDC meeting.
- 3. Prof. Mukesh Sharma, Coordinator of CESE presented an overview of the Center, including various activities currently underway. The activities include research projects, conferences, community service, and students-participation in the product-development. The research projects, mostly experimental, are related to CO₂ sequestration, removal of toxic compounds such as arsenic and fluorides from wastewater, development of cryogels and also that of biosensors. The focus of the Center is technology development, specifically remediation and sensors.

The coordinator informed the members that a total of approximately Rs. 15 crores were received via the MPLADS project. Approx. Rs. 9 crores was spent on the construction of the building. Majority of the remaining fund, accrued over three years, was spent on purchasing various research equipment such as ion-chromatography, ICP-MS, AAS, BET area analyzer, nanoball mill, incubator, UV-VIS, and millipore ultra-pure water preparation unit. The coordinator briefly described the salient features and capabilities of the equipment.

The theme associated with the individual laboratories at the Center, viz. sample preparation, trace analysis, environmental remediation, and biotechnology, was elaborated. On the matter related to the supporting staff, the members were informed that one senior research scientist is currently employed in the Center through Institute support.

Professor Sharma also informed the members that considering scope of joint research activities, the present (Solar) Energy Group of the institute has been invited to participate in the research activities of the Center.

During the presentation, a few members raised concern on the functioning of the Center. In particular, they were of the following opinion:

- (a) There are only a few faculty who are engaged or involved in the research activities at the Center. In fact the number is dismal.
- (b) Significant (laboratory) space in the Center is unutilized (unoccupied).

- (c) Some of the projects started in or through the Center are not truly in line with the themes of Environment as such and have only peripheral relevance.
- (d) There is in general ignorance in the Institute about the facilities that are available in the Center and their accessibility for use.
- (e) The meetings held to oversee the progress of the Center are infrequent.

After discussions, the IRDC members suggested the following recommendations for smooth functioning of the Center that would enhance its reputation and bring in a greater deal of participation:

- (a) The core committee should be re-constituted to include a few faculty members in the Institute, other than those who are also the IRDC members, as experts and/or observers.
- (b) The meeting should be held at least once in a month.
- (c) The core committee should define the goals and the objectives of the Center, on short as well as long term basis. Such information should be available on the website of the Center.
- (d) The participation of the faculty in the Center should be higher and the present strength should continuously increase.
- (e) The Center should update its website giving the list of equipment installed, their features and the contact/resource person.
- (f) The Center should ensure that safety norms are strictly adhered to, especially in handling bioactive or biohazardous materials.

After the meeting, the Dean, R&D informed the members that SIDBI has expressed desire to assist the Center in matters related to patents-filing, technology-transfer, and product-commercialization. The IRDC members welcomed the suggestion.

The members were taken on a tour of various laboratories at the CESE.

Prepared by

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Nishith Verma Convener-IRDC

K Muralidhar

Dean: R&D

Minutes of the IRDC meeting held on October 19, 2010

Members Present: Drs. K. Muralidhar (Chairman), N. Verma (Convener), A. Kushari (co-convenor), B. Basu, S. Banerjee, D. Philip, Utpal Das, Avinash K. Agarwal, A. Bandyopadhyay, A. Garg, Kumar Ravi Priya, Satyajit Banerjee, J. Subramaniam, Ms. Rashmi Parihar, Mr. K. S. Rao, Nitin Kaistha, Siddhartha Panda, Navpreet Singh, Dr. R.K. Sachan, DR (R&D).

- 1. Convener welcomed all IRDC members, including new members, to the meeting.
- 2. On completion of the tenure of Prof. N. Verma as the convenor-IRDC for the year 2009-10, Dr. Abhijit Kushari was nominated as the convenor-IRDC for the year 2010-11. Prof. Sandeep Verma was nominated as co-convenor-IRDC. Prof. Sandeep Verma will continue as the convenor-IRDC for the subsequent year 2011-12. All members enthusiastically welcomed the new convener and co-convener. The service of all outgoing members was also acknowledged and placed on record.
- 3. The minutes of the meeting held on August 19, 2010 were confirmed, with the following amendments made in item 4 of the minutes, as per the e-mail comments received from Dr. Dhirendra Katti, Warden-RA hostels:
 - a. Last sentence of 1st paragraph corrected to "The officer-in-charge, R&D office has been requested to look into such possibility."
 - sentence of b. 2nd last 2nd paragraph corrected to "It was also suggested that those whowill also given consideration on a be case-to-case basis."
 - c. 3rd paragraph the word 'discretionary' deleted.
 - 4. Following the comments received from Profs. Mukesh Sharma and Sandeep Verma, the minutes of the meeting held on September 14, 2010 were confirmed, with the following amendments:
 - i. CESE, IIT Kanpur was awarded the prestigious Green Globe Foundation Award (GGFA) for extraordinary contribution to making our environment a much greener place, in the category of *Best Practices in Green Design and Architecture*. Arising from research activities at CESE, 12 publications in journals and conference proceedings have emerged.
 - ii. It was suggested that reorganization of investigators in the thematic groups should be done. In addition, there should be fresh call for new themes/thrust areas.
- 5. DORD announced that Dr. Bikramjit Basu will be the new Warden of RA hostels and related residential accommodation. The services rendered by Dr. Dhirendra Katti were highly appreciated.
- 6. Dr. Bikramjit Basu presented the following items in the meeting:

a. Blocking of a few rooms in VH for overseas exchange researchers:

Dr. Bikramjit Basu informed IRDC that that currently, no priority is given for Indian/International researchers visiting the campus as part of the ongoing large multi-

institutional international research projects. In last few years, the number of international projects has increased and has resulted in a number of visits by foreign PhD and/or post-doctoral researchers to our campus. On many instances, VH rooms are managed on an adhoc basis and examples are cited where requests of PIs are turned down even 2-3 months before the date of visit. A general reason given for such rejection is booking related to conferences and workshops. This often causes problems in scheduling the exchange visits and planned set of experiments as the schedule of large research programs is delayed. It was mentioned during the discussion that Institute, while endorsing such project proposals, does agree to extend full institutional support to facilitate such large projects. Currently, the guest rooms in hostels or Type-V houses do not have VH-like arrangements and services. In view of logistical advantages, many PIs from other institutions, particularly from abroad, often insist that their students or post-doctoral fellows be accommodated in VH rooms.

After a long discussion on this important issue, IRDC members unanimously suggested that the Institute must give priority to VH accommodation for *exchange-visitors*. Accordingly, five rooms in VH may be reserved for the visiting researchers, with each stay lasting for up to 6-8 weeks. These rooms, like QIP rooms, should not be allotted to other guests. PIs will be advised to book such rooms at least one month in advance. For visits of more than two months, Guest rooms at RA hostel or other hostels may be arranged.

b. Civil construction works in laboratories:

Dr. Bikramjit Basu presented this agenda item before IRDC. While mentioning the background of this agenda, he cited various examples of civil construction jobs in the existing research laboratories to facilitate research of new or on-going R&D projects. Some members pointed out that currently it takes more than 6 weeks by IWD to arrive at a decision on the request of PIs for such modification. In some cases, faculty members are advised to meet with the expenses towards the civil jobs from the respective project grant of the PI. Apparently, there is also no uniform policy across the institute on this matter. This leads to significant delay in installing equipment and consequently, PIs often face problems in completing the approved projects tasks in a timely manner. The experimental research work of several postgraduate students is also severely delayed.

Following extensive discussion on this important issue, the members categorically pointed out that there is no provision of meeting such costs towards civil constructions in the research projects. In fact, the Institute (the R&D office) takes an undertaking of providing all infrastructure (civil/electric/air conditioning) facilities, while submitting the proposals by PIs to the various funding agencies, including DST, CSIR, DBT, and MHRD. Therefore, IRDC suggested that Institute should provide necessary financial approval for all such laboratory modification/construction work. Subsequently, IWD should be requested to take up such civil construction jobs on a priority basis. This step will facilitate sponsored research as well as academic research of postgraduate students. To this end, the IRDC members decided to request the Director for an approval on the subject matter.

c. Service of Bluedart/DHL and Customs clearing agencies:

While presenting this agenda item before IRDC, Dr. Bikramjit Basu mentioned that this issue (import or export of the equipment in and out of the campus) was discussed earlier in IRDC meeting. Most of the members are of the opinion that currently the service is managed in an ad hoc manner by the Stores/Import section, to the effect that very often faculty members are asked

to produce documents several times over a considerably stretched period. Significant effort is invested in following up with the Stores. In addition, the service of Bluedart/DHL or, the agencies currently hired by the Stores for the purpose, has considerably worsened. There is inordinate delay in receiving or delivering the equipments.

A few members suggested that the service of Fedex, on the other hand, is attractive as well as efficient and should be engaged by the Institute. The members also suggested that the service of Import/Export should be institutionalized through Fedex having one single-account number in order to speed up the matter and to cut down the processing time.

On a similar note, a few members pointed out that deductions towards the custom duty, freight charges, and LC opening are made from the project at different stages of the project. Sometimes, the bills are received by the PIs after closure of the project and PI has to adjust such expenses from other ongoing projects, which do not have any linkage with the respective equipment! The officer-in-charge was requested to look into the matter and try streamlining the processing of such bills. It was also suggested that the in-charge, Stores & Purchase, be invited to the IRDC meeting for clarifications and suggestions to improve upon the current services of agencies engaged in import and export.

7. **Thrust areas:** The IRDC members had extensive discussions on the agenda item, identifying a few thrust research areas, which the Institute will like to additionally support.

A number of interesting ideas and suggestions were put forward. One such idea was to identify a few projects of national importance (for example, Ganga cleaning) and explore how the Institute can contribute to implementing such projects. Another suggestion was made to identify a single project (or mission) at the Institute level, for example, creating a zero energy house or recycling and re-use of waste disposal. Alternatively, a few emerging futuristic areas on the international scenario may be identified. Another suggestion came up that theoretical research should also be encouraged and considered for financial support. Involvement of the students in the thrust projects should also be the encouraged and form the basis of thrust areas.

It was felt that some more brainstorming sessions are required to crystallize the thrust areas. Dean, R&D suggested holding one of such sessions over the breakfast on one of the coming Saturdays, which all IRDC members unanimously and enthusiastically supported.

Prepared by

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Nishith Verma Convener-IRDC

K Muralidhar

Dean: R&D

Draft Minutes of the IRDC meeting held on Feb. 7th 2011

Members present: Drs. A. K. Chaturvedi, A. Kushari, S. Verma, N. Kaistha, A. Bandyopadhyay, T. V. Prabhakar, S. N. Tripathi, K. Ravi Priiya, D. Bahuguna, P. Venkitanarayanan, D. Philip, B. V. Phani, S. Panda, S. Roy, R. K. Sachan, Mr. S. Nayak, Mr. K. Balasundarm

Special Invitee: Prof. K. Muralidhar

- 1. The minutes of the IRDC meeting held on 30th Nov. 2009 were confirmed.
- 2. IRDC members expressed their gratitude to Prof. Muralidhar and praised his role as Dean Research and Development to usher in welcome changes to the functioning of the office of DORD.
- 3. Dean R&D, Prof. Ajit Chaturvedi, addressed the IRDC members. The summary of his address was as follows:
 - a. Currently a significant fraction of the DORD's time goes into relatively mundane matters or untying bureaucratic knots. There is a need to identify possible structural changes in the system such that the DORD can focus more on big funding opportunities, funding opportunities for inter-disciplinary projects, international projects, execution of big projects, and technology transfer to industries, technology absorption, relationship with well funded government research organizations like DAE, ISRO, DRDO etc.
 - b. Identification of such structural changes will have to be done after due deliberations.
 - c. Once the possible changes are identified, approvals at appropriate levels will be required to affect them.
 - a. While some changes may need the concurrence of the BoG, some others can be done with the concurrence of the Director.
 - e. Last but not the least; the changes should be identified keeping in view the convenience of PIs and their possible impact on the delay in the processing of papers.
- 4. The address of the DORD was followed by a discussion regarding the possible changes needed to help the PIs in the conduct of the projects. The points that emerged out of this discussion are:

- a. The availability of space to conduct research/ project work remains a major cause of concern. Big projects cannot be taken due to the lack of space and infrastructure (like AC's).
- b. The lack of space leads to serious safety concerns in research labs.
- c. Proper storage and disposal of hazardous material should be given top priority.
- d. Lack of trained manpower and retaining the few good project employees is another issue that requires serious consideration.
- e. There should be an avenue for the academic growth of project staff by providing them admission into the graduate programs. This initiative is expected to attract better students to project employment.
- f. The office of DORD should establish liaison with the funding agencies to recover pending funds.
- 5. Online registration and disbursement of salaries for work assignment is a good initiative. The IRDC members felt that this scheme should not be jeopardized due to the inability of few PIs to fill up the online forms in time. Therefore, IRDC suggested the following procedure:
 - a. An email should be send to the PIs regarding the attendance entry at the beginning of every month.
 - b. If a PI does not fill up the attendance entry form by the 5th of a month, the maximum number of days per month, approved for that particular work assignment, will be considered as default attendance and the labor supplier should be asked to release the salary accordingly.
- 6. IRDC decided to circulate the minutes of IRDC meeting to the acadstaff after confirmation.

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Abhijit Kushari Convener - IRDC

Dean, R&D

Minutes of the IRDC meeting held on March 8th 2011

Members present: Drs. A. K. Chaturvedi, A. Kushari, S. Verma, B. Basu, N. Kaistha, A. Garg, A. Bandyopadhyay, T. V. Prabhakar, K. Ravi Priiya, P. Venkitanarayanan, B. V. Phani, P. Minshi, D. Gupta, U. Das, R. K. Sachan, Ashsis, Mr. S. Nayak

1. Announcements by Dean R&D

- a. Cash advance limit increased to Rs. 10,000/-
- b. Efforts to reclaim student scholarships from projects (from Account 1 to DPA): The office of DORD is discussing the issue with the institute authorities to finalize the modalities. There was a suggestion that if the scholarship for a PhD student can be paid for some duration from a project then that amount should be rolled over to pay future scholarship (beyond 4 yrs. of MHRD scholarship). The office of DORD is to keep track of such transactions.
- c. New form for upgradation of project employees in an ongoing project is being developed. Some members of IRDC suggested that there should be a provision for transferring a project employee from one project to another under the same PI without going through the selection process again. This issue to be discussed as an agenda item in an IRDC meeting.
- d. Efforts to allow admission of project employees in M.Tech program: There has been discussion with the Chairman SPGC on this issue. This needs to be followed up.
- e. Efforts to provide accidental insurance cover to project employees: The office of DORD is exploring the possibility of either group insurance or individual insurance for project employees. Discussions are being held with various insurance providers.
- 2. The minutes of the IRDC meeting held on 7th Feb. 2011 were confirmed.
- 3. Amendment of Terms & Conditions of Employment (DORD/IITK/2009/01 dt: 1/ 8/ 2009) regarding the increments to be given to project employees.

Following amendments were approved by IRDC:

<u>Clause 2:</u> At the time of selection, the selection committee can recommend a higher start by offering a maximum of five increments in case of experienced candidates. The higher start from the initial level of the scale can be calculated duly counting the number of years of past experience and offering one increment each for each year of service already put in, over and above the minimum number of years required towards applicable experience. However, for candidates to be employed in sponsored/consultancy projects, even higher number of increments can be given to candidates with exceptional records on specific recommendation of the selection committee.

<u>Clause 3:</u> In case of satisfactory performance, there can be one increment on completion of one year. However, in case of deserving and excellent performance, there can be upto two increments for each year or one increment at the end of six months based on the specific recommendation and justification provided by the Principal Project investigator for sponsored/consultancy projects.

- 4. Party payments from projects: In order to reduce the cash transactions, the PI's should be encouraged to opt for direct payments to the vendor through the DORD office as much as possible.
- 5. Suggestions for improving the DORD online system: Dean R&D informed the IRDC members about his meeting with the Office Automation group. It was felt that there is an urgent need to remodel the DORD online system. Following additional suggestions emerged after the discussion:
 - a. Purchase order number should appear in the ledger
 - **b.** The purpose of advance (equipment, consumables, etc.) should appear in the bank transfer email
- 6. Formation of IRDC sub-committee to remodel the DORD website (including DORD forms):

Following sub-committee was constituted to remodel the DORD website: Dr. Bikramjit Basu, Dr. T. V. Prabhakar, Dr. Nitin Kaistha, Dr. Deepak Gupta, Dr. A. Kushari, Dean R&D

The same committee will suggest the changes in the online system (item no. 5).

Note: Prof. Deepak Gupta had communicated his interest to be part of the subcommittee to revamp the online system. Therefore, his name was included in the subcommittee after the meeting.

- 7. Any other matter:
 - a. Prof. Prabhakar raised the issue of deduction of tax on the honorarium deposited in PDA account. The Dean R&D informed the members that he is aware of this issue but he has to find out why this was done in the past and whether it is possible to bring a system which restores the benefits of the earlier system.
 - b. Bank Transfer of advances: Some IRDC members suggested that the option of opening project accounts in SBI/UBI for individual PI's should be explored (similar to the institute accounts used for conducted QIP courses/ workshops/ conferences). Prof. Phani has kindly agreed to discuss this issue with the banks.
 - c. Negative balance in projects: A sub-committee was constituted to propose modifications in the existing procedure of operating projects with negative balance. The members of the sub-committee are: Dean R&D, Dr. A. Kushari, Dr. S. Varma and Dr. B. V. Phani. The committee is to submit its proposal for discussion in the next meeting of IRDC.

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Abhijit Kushari Convener - IRDC

Dean, R&D