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DIAT/F/10(3)/BoM/2013-Adm

23rd June 2015

**MINUTES OF THE 6th MEETING OF THE BOARD OF MANAGEMENT (BoM) OF
DIAT(DU) HELD AT DIAT(DU) PUNE AT 1430 HRS ON 12th JUNE
2015**

1. The following were present:-

(a) Dr S Pal	VC, DIAT (DU)	Chairman
(b) Dr GS Malik (thro Video)	CC(R&D) HR, DRDO Hqrs	Member
(c) Sh RG Viswanathan(thro Video)	Addl FA(R&D), DRDO Hqrs	Member
(d) Dr Hina Gokhale	DHRD DRDO	Special Invitee
(e) Prof KN Ganesh	Director IISER, Pune	Member
(f) Prof Girish Kumar	IIT Bombay	Member
(g) Dr Ranjit Date(thro Tele)	MHRD Rep	Member
(h) Dr SK Das	Dean (AS)	Member
(i) Dr SE Talole	Dean(T)	Member
(j) Dr Sangeeta Kale	Chairperson DRC	Invitee
(k) Dr SK Panigrahi	Chairman PGC	Invitee
(l) Dr DK Thakur	CoE, DIAT(DU), Pune	Pmt Invitee
(m) Sh Ramesh Jahagirdar	FO/DIAT	Special Invitee
(n) Rear Admiral (Retd) VS Batra, VSM	Registrar, DIAT(DU) Pune	Secretary

2. Registrar, DIAT(DU) welcomed all to the 6th meeting of the BoM and sought leave of absence for Prof Rajanna and Dr PK Khanna. Thereafter, Registrar invited VC for opening remarks.

3. **NAAC Team Visit to DIAT.** VC stated that the NAAC team visited DIAT 12-14 May 2015 and complimented that DIAT personnel rose to the occasion and there was visible improvement all around. Though the final grade is still awaited, VC shared the feedback given by NAAC team during exit conference as per details given below:-

- (a) Need for creation of Centres of Excellence.
- (b) Need for optimal utilisation of DIAT.

- (c) Need for Inter-disciplinary research at DIAT.
- (d) Spectrum of courses being offered at DIAT needs to be broadened.
- (e) Need for introduction of Choice Based Credit System as per directions of the UGC.
- (f) Increase in number of seats in each programme.
- (g) Need for early full scale activation of Incubation Cell.
- (h) Better exploitation of ICT in Education at DIAT.
- (i) Introduction of Professional Development Allowance/Fund.
- (j) Improvement in Library facilities.

4. **New M Tech Programmes.** VC apprised that whilst new M Tech Programmes in Signal Processing and Communication (**with specialization in Navigation Systems and Wireless Network Applications**) and Robotics are being started from AY 2015-16, one on UAV will be started in AY 2016-17. On a query by CCHR and Addl FA & JS, it was clarified that new courses in 2015-16 were not offered to DRDO and Services this year due to paucity of time. Addl FA & JS stated that same could be tried even at this late stage. Accordingly, DHRD agreed to take up the matter with RAC (**formal communication from DIAT has since been sent to DRDO Hq**).

5. **Upgradation of Labs.** VC emphasized the need for upgradation of Technology Deptt labs as was also observed by the NAAC Team. In this connection, VC apprised that a well thought out Three Years Equipment Induction Plan (**TEIP**) has been forwarded to DRDO Hq as part of the budgetary projections for 2015-16. VC solicited DRDO Hq help to get the same approved so that work can commence on inductions in a time bound manner.

6. **Transfer of DRDO Faculty Positions to DIAT.** VC stated that there is a need for deviation from standard Student:Teacher ratio norms of the UGC for DIAT as the Institute is running varied programmes with lower students strength. He stated that whilst advertisement has been published (**last date 22nd June 2015**) inviting applications for filling up reserved category vacant faculty posts at DIAT, DRDO Hq may consider transferring atleast 50% of 28 vacancies earmarked for deputation of DRDO Scientists. During the discussion that ensued, both CCHR and Addl FA&JS stated that there would be a need to go for amendment to Govt sanction and further advised that it may be desirable to examine possibility of short term re-appropriation of vacancies so that option always exists to depute DRDO Scientists on deputation subsequently if the availability improves. VC agreed to take up a detailed proposal with various options (**letter since sent to DRDO Hq**).

7. Thereafter VC directed Registrar to proceed with the Agenda. Details of issues discussed and decisions taken are given in succeeding paragraphs.

8. **New Members.** Consequent upon reconstitution, following new Members of the BoM introduced themselves:-

- (a) Dr SE Talole, Dean(T).
 (b) Dr K Balasubramanian, HoD Deptt of Material Engineering
 (c) Dr DK Thakur, Associate Professor, CoE.

Progress on Minutes of the BoM meeting held on 23rd March 2015

9. The progress on the various decisions taken at the BoM Meeting on 23rd march 2015 are tabulated below:-

	Point	Progress
(a)	Contract Faculty	All Contract Faculty have been relieved on expiry of their respective last extended term(s)
(b)	Deptt of Biosciences	Future plans will be worked on receipt of DRDO Hq directions in Sep 2015. Issues regarding Guides for M Tech Students have been resolved. Issues regarding PhD guides are also in the process of getting resolved. Two DRDO Sc (one recently retired) have been enrolled as Adjunct Faculty.
(c)	Purchase of replacement vehicle	Vehicle (Innova) against DGS&D RC order received.
(d)	Awards at DIAT	Revised list has been promulgated and forwarded to DRDO Hq.
(e)	New M Tech Programmes	Being discussed as a separate agenda point
(f)	Budget for 2014-15	As directed by BoM at the last meeting, a TEIP aligned to the academic growth has been drawn up and forwarded to DRDO Hq. Focus has been to strengthen Technology Deptts. Budget as concurred by the FC for 2014-15 is being discussed as a separate Agenda Point.
(g)	Strength of various M Tech programmes in 2015-16	As approved by the BoM at the last meeting, strength in programmes is being kept at 15-25.
(h)	POINTS 20 Programme	The programme is due to commence on 03 rd Aug 2015 for which detailed proposal has been forwarded to DRDO Hq. Early approval was accordingly solicited.
(i)	Cost per Student	FO stated that following costs have been arrived at:- (a) Including Salary component. Rs 5,78,795/- (b) Excluding Salary component. Rs 2,54,420/- Prof Ganesh, IISER stated that this was quite comparable to the cost in IISER. Registrar stated that with proposed increased fee

		<p>structure and intake in each programme, per student cost will come down considerably.</p> <p>Addl FA & JS stated that DIAT should work on increased internal accruals and also undertake cost vs return analysis before starting any new future programme. He also advised that notional costing of servicing DRDO and Services candidates may also be worked out by FO.</p> <p>VC agreed to undertake the exercise and present the same at the next BoM meeting.</p>
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10. Thereafter, **the BoM ratified the minutes of the 5th Meeting.**

Reporting Issues

11. Registrar apprised the BoM following:-

(a) NAAC Team visited DIAT 12-14 May 2015 and NBA Team is due to visit in Aug/Sep 2015.

(b) Recruitment process for 09 faculty positions under various categories has been initiated through advertisement in press. Extended date for receipt of applications is 22nd Jun 2015.

(c) Faculty on deputation/attachment has been sought from DRDO Hq against vacant positions **(02 borne against sanction of 28)**.

(d) DRDO HQ have also been approached for seeking Service Officers on deputation/attachment for teaching jobs at DIAT in view of the formal bifurcation of MILIT w.e.f 01st Apr 2015.

(e) Convocation is now planned in 2016.

(f) DRDO Hq have been requested to appoint a committee to review Statute w.r.t Service Conditions and Recruitment Rules so that same are aligned with instructions issued by UGC/DOP&T from time to time.

(g) Prof Girish Kumar of IIT B has been nominated as the **Chancellor's rep in all selections committees of the DIAT.**

(h) Placements details during 2015:-

Department	Name of the Student	Company/Organization
Aerospace	Mr. Dhherajkumar Pande	DRDO
Engineering	Mr. Nilesh Suresh Mate	DRDO
Applied Mathematics	Ms. Shruti Dindorkar	3D PLM

Mechanical Engineering	Mr. Kallola Das Mr. Pavan Kumar Patil Mr. Akshay Rai (on hold)	TATA POWER SED TATA POWER SED TATA POWER SED
Applied Chemistry	Mr. Vinay Gupta Mr. Vivekanand Swami Ms. Neha Singh Ms. Jyoti Shrivastava	Solar Explosives Solar Explosives IIT Mumbai(PhD) IIT Hyderabad(PhD)
Computer Engineering	Mr. Akshay Sarode	Delloite Inc., Mumbai

Agenda Points

12. New M Tech Programmes. Details are given below:-

(a) New Programmes only for Open Category during AY 2015-16:-

Programme	Specialisation	Numbers Admitted	Covered under AICTE DBT Scheme
Signal Processing and Communication	Navigation Systems	25	Yes
	Wireless network and Applications		
Robotics	-	15	No

(b) Programmes offered to Open category for the First Time. Last date for receipt of applications is 12th June 2015. Details are given below:-

Programme	Specialisation	Numbers to be Admitted	Covered under AICTE DBT Scheme
Sensor Technology	LEOC	06	Yes
Technology Management	-	10	No

13. On the advice of the Addl FA & JS, BoM decided to make efforts (**even at this late stage**) for getting students from DRDO and Services in the new programmes on Robotics, Navigation Systems and Wireless Network Applications (**Formal letter since sent to DHRD/DRDO Hq**).

Action: Registrar/DHRD

14. Likely Programme-wise strength in M Tech during AY 2015-16:-

Programme	Deptt	Open category	Likely through RAC/SHQs
Guided Missiles	AE	07	08
Armament/Combat Vehicles	ME	12	01
Marine Engg	ME	04	10
Robotics	ME	15	-
Chemical Science and Technology	AC	14	01
Material Science and Technology	Mat Engg	10	04
Radar and Communication	EE	12	07
Signal processing and Communication (WSA, NS)	EE/CSE	25	-
Sensor Technology	AP	13	-
Sensor Technology(LEOC)	AP	06	02
Modelling and Simulation	AM	12	03
Cyber Security Technology	CSE	08	11
Management	TM	10	09
Air Armament	AE	-	04
Defence Electronics System	EE	-	06
Total		148	66

Revision of Fee Structure

15. After brief discussions BoM approved following revisions:-

(a) **M Tech Programmes other than Technology Management(TM).** Increase from Rs 5000/Semester(fixed in 2008/2009) to Rs 12,400/Semester.

(b) **M Tech Programmes in Technology Management(TM).** Fee for open category @ Rs 2.51 Lakhs PA (*Fee for similar programme at IIT B and IISc being Rs 4,28,500 PA and Rs 3,00,000 PA respectively*).

(c) **Ph D Programmes.** Increase from Rs 5,000/Semester to Rs 25,000/Semester.

16. Addl FA&JS reiterated the need to make programmes, as far as possible, cost neutral

Introduction of Fellowship

17. Registrar apprised that at present only following Programmes are not covered by AICTE DBT Scheme even though students are/will be GATE qualified:-

(a) **Biosciences and Engineering.** The current batch was admitted during AY 2014-15 and the programme is being discontinued from AY 2015-16.

(b) **Robotics.** The first batch is being admitted during AY 2015-16. It is proposed to replace existing dormant programme on GTT (**approved by AICTE**) with Robotics from batch to be admitted in AY 2016-17.

18. Registrar sought BoM's approval to pay following:-

(a) **Students of 2nd Year M Tech in Biosciences and Engineering.** Fellowship @ Rs 12,400/PM for AY 2015-16 only.

(b) **Students of M Tech in Robotics.** Fellowship @ Rs 12,400/PM for AYs 2015-16 and 2016-17.

19. After brief discussion, BoM approved the proposal.

Approval-in Principle(AIP)

20. Registrar sought AIP for the following:-

(a) **Hiring of Hostel Accommodation.** In view of likely increase in strength of M Tech students as also bigger POINTS Batches, it is necessary to hire accommodation for the students (they will pay all the fees etc) and arrange conveyance to the DIAT. Prof Girish Kumar suggested that proposal for construction of Girls/Addl Hostel need to be pursued on priority. On a query from CCHR, it was clarified that proposal sent to DRDO Hq/DCW&E was kept pending as per decision of the DMC. CCHR advised that whilst hiring hostel accommodation and arranging conveyance DIAT needs to indemnify from any liabilities on account of any contingencies. **Thereafter BoM approved DIAT proposal to examine feasibility.**

(b) **Contributory Group Insurance Scheme.** BoM approved examining feasibility of Introduction of **Contributory Group Insurance Scheme (GIS)** for DIAT Personnel.

(c) **Health Insurance Scheme for Students.** After discussions, BoM approved introduction of a **Contributory Health Insurance Scheme (HIS)** for the Students. **The premium liability to be included in the Fees.**

(d) **Starting of Deptt of Humanities at DIAT.** Registrar proposed that as is the case in most of Technology Education Institutes and as per the advice of the NAAC Team, it is proposed to start a Deptt of Humanities for teaching soft skills, communication skills etc to students at DIAT. Prof Girish Kumar also endorsed the proposal as similar deptt also exists at IIT B. After discussions, BoM approved that **for the time being, a capsule could be outsourced** and based on the experience, proposal can be formulated for a separate Deptt in due course.

Academic Calender for 2015-16

21. BoM approved the following Academic calendar as recommended by the Academic Council (AC):-

Semester	Duration	Break	Result
Autumn	Jul-Dec 2015	14 -27th Dec 2015	28th Dec 2015
Spring	Jan-Jun 2016	06 Jun-03 Jul 2016	04th Jul 2016

Annual Accounts for 2014-15

22. FO gave detailed brief on the audited annual accounts for the FY 2014-15 as concurred by the Finance Committee. **Addl FA & JS** reiterated the need for economy in administrative and establishment costs in addition to making programmes at DIAT cost neutral after duly factoring the notional income on account of imparting education and research programmes for DRDO Scientists and Services Officers. Thereafter, BoM approved the Annual Accounts for FY 2014-15 for appending to the Annual Report for 2014-15.

Budget for 2015-16

23. FO apprised that during the 5th meeting, BoM had approved revenue expenditure amounting to Rs 24.15 crores with directions to forward a **TEIP** for incurring Capital Expenditure. The same has been forwarded and details are summarised below:-

- (a) FY 2015-16. Rs 23.85 crores.
- (b) FY 2016-17. Rs 26.89 crores
- (c) FY 2017-18. Rs 31.01 crores.

24. After detailed discussions, Addl FA & JS advised the following:-

- (a) Prioritisation of Plan for 2015-16 (since done and forwarded to DRDO Hq).

- (b) FO to visit DRDO Hq for detailed discussions.
- (c) FO to explore feasibility of following model in similar organizations whereby sanction is accorded by DRDO Hq, procurement is effected by DIAT and ownership of item is vested with DRDO.
25. VC sought early approval of the budget so that DIAT can proceed ahead in a time bound manner.

Details of Patents

26. Chairman IP Cell/DIAT made a detailed presentation (**Appendix A**) on patents filed and the procedure being followed. Dr Date felt that the procedure being followed is time consuming for logical culmination.
27. Chairman IP Cell clarified that since MoU was under deliberation there was a slight delay in proceeding ahead. Now that the same has been finalized the whole process is likely to move at a faster pace.
28. **Addl FA &JS suggested** that for marketing, DIAT could explore feasibility of concurrent marketing of patenst through FICCI/CII as is being done by DRDO Hq. **DHRD/DRDO agreed to examine the feasibility.**

Details of Publications

29. Dean(T) gave deptt-wise details of the publications(Appendix B) with range of Impact Factor. **Addl FA&JS** stated that the same needs to be presented in comparison with previous years. **Prof Ganesh** sought the same with individual impact factor instead of range of Impact Factors. **VC directed Dean(T) to do so at the next BoM meeting.**
30. VC thanked all for constructive and meaningful participation in the meeting. There being no further point, the meeting was adjourned.
31. Next meeting of the BoM will be held on **11th Sep 2015 at Pune.**



(VS Batra)
Rear Admiral(Retd)
Registrar & PD POINTS Programme

Enclosures: Two

Distribution:

All Members

Copy to:-

Chancellor, DIAT *through CC(R&D) HR/DRDO Hqrs,*

Secretary Defence (R&D)

MHRD (Secretary Higher Education)

Secretary UGC

Appendix A

Details of Patents

By Chairman IPR Cell

Details of Patents Filed

S. No.	Patent Title	Patent Appl. No.	Initial Patent Filed on	Complete patent filed on	Present status
1	Materials and Method for Synthesis of Metals	101430/M/2012	11/05/2012	29/05/2013	Patent examination pending (due on 11/05/2016)
2	Material and Method for Road Construction	129930/M/2012	11/04/2012	12/01/2013	Patent examination pending (due on 11/04/2016)
3	Anti Corrosive Coating Based on Water Thermoplastic Materials	111330/M/2012	11/04/2012	02/04/2013	Patent examination pending (due on 04/04/2016)
4	Hydrophobic Coating	20930/M/2013	11/01/2014	11/01/2014	Patent examination pending (due on 11/01/2017)
5	Self-Healing Materials	43430/M/2014	11/02/2014	12/02/2014	Patent examination pending (due on 11/02/2017)
6	System for Validation and Dispersion of Nanoparticles in Polymer Composite Matrix	204330/M/2013	11/06/2013	09/01/2014	Patent examination pending (due on 11/06/2017)
7	Polymer membrane and the process of preparing the same	60130/M/2013	11/02/2013	27/02/2014	Patent examination pending (due on 24/02/2017)

Continuing..... Details of Patents Filed

S. No.	Patent Title	Patent Appl. No.	Initial Patent Filed on	Complete patent filed on	Present status
8	Selective Purification of Oxidant (O ₂) and Oxidant (V) ions Using Two-Phase Catalytic Composite Membranes for Basic Industry	273530/M/2013	21/08/2013	25/06/2014	Patent examination pending (due on 21/08/2017)
9	Water Absorber for Basic Industry	65130/M/2014	25/02/2014	Due on 25/02/2015	Complete filing due on 25/02/2015 Patent examination due on 24/02/2015
10	Edget Printing of Micro-Nano-encapsules On Different Substrates	94230/M/2014	24/02/2014	Due on 24/02/2015	Complete filing due on 24/02/2015 Patent examination due on 24/02/2015
11	The Process For Fabrication Of Laminated Oil And The Product (Chain Thermostat)	64030/M/2011	24/02/2014	Due on 24/02/2015	Complete filing due on 24/02/2015 Patent examination due on 24/02/2015
12	Optimised Process Matrix and Process for preparing the same	019330/M/2014	24/02/2014	Due on 24/02/2015	Complete filing due on 24/02/2015 Patent examination due on 24/02/2015
13	Cost Efficient Processing of Infectious Free Composite of Immunity Induced Peptides of Ultra High Temperature Ceramic (UH-T) For Personal Care Products	64130/M/2014	24/02/2014	Due on 24/02/2015	Complete filing due on 24/02/2015 Patent examination due on 24/02/2015
14	Process For Synthesizing Three Dimensional superhydrophobic Foam Composite For Oil-Water Separation	229630/M/2014	11/07/2014	Due on 11/07/2015	Complete filing due on 11/07/2015 Patent examination due on 11/07/2015

Details of Patents Filed

S. No.	Patent Title	Patent Appl. No.	Initial Patent Filed on	Complete patent filed on	Present status
1	High-Ando Esters of Polyolefin, Analysis and Method of Synthetic Thermal	193330/M/2013	05/06/2014	30/02/2014	Patent examination pending (due on 05/06/2017)
2	Enhancing and Recovery of Energy Materials Using Anti-Liquids	273130/M/2013	21/08/2013	24/07/2014	Patent examination pending (due on 21/08/2017)
3	Method For Preparation Of Fe Ppy And C/Fe Ppy Nanocomposites For Fuel Cell Electrodes	140330/M/2014	10/08/2014	02/08/2014	Patent examination pending (due on 28/08/2017)
4	Control Limit Method For Preparation of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	109902/M/2014	01/06/2014	08/05/2014	Patent examination pending (due on 08/05/2017)
5	Process For Making of Phase Change Material On Cellulose Fiber And Its Use Thereof	101130/M/2014	15/05/2014	11/04/2014	Patent examination pending (due on 20/04/2017)

Details of Patents Filed


S. No.	Patent Title	Patent Appl. No.	Initial Patent Filed on	Complete patent filed on	Present status
1	Device and Process of Making Nanoparticle Drug Complex	200430/M/2014	11/06/2014	12/06/2014	Patent examination pending (due on 12/06/2017)
2	A Miniaturized Device For Calculating Acid-Base, Redox, and Thermodynamic Functions and Methods of Making Thereof	302330/M/2014	09/08/2014	Due on 09/08/2015	Complete filing due on 09/08/2015 Patent examination due on 09/08/2015

Details of Patents Filed

S. No.	Patent Title	Patent Appl. No.	Initial Patent Filed on	Complete patent filed on	Present status
1	Secure Mobile App Tapping Device eSMARTS	225330/M/2013	24/01/2014	24/01/2014	Patent examination pending (due on 24/01/2017)


Details of Patents Filed

S. No.	Patent Title	Patent Appl. No.	Initial Patent Filed on	Complete patent filed on	Present status
1	Dynamic Monitoring & Alarming Waste Defecament	193330/M/2014	13/06/2014	13/06/2014	Patent examination pending (due on 13/06/2017)



Appendix B

Details of Publications By Dean(Technology)



PUBLICATIONS: 2014-15

Sl. No.	Department	Nos.	Impact Factor
1	Aerospace Engineering	14	0-2.4
2	Applied Chemistry	23	1-6.7
3	Applied Mathematics	22	0.5 to 2.6
4	Applied Physics	25	2-3
5	Computer Engineering	10	0.7-1.2
6	Electronics Engineering	06	0-1.6
7	Materials Engineering	45	0.43-5.9
8	Mechanical Engineering	34	0- 3.71
9	Technology Management	02	0-1.22
	Total	181	

