

DEFENCE INSTITUTE OF ADVANCED TECHNOLOGY

(Deemed to be University under section 3 of UGC Act 1956)

Girinagar, Pune – 411025

No.DIAT/F/ADMIN/13th GCM/2020

Dated: 9/06/2020

MINUTES OF THE 13th MEETING OF THE GOVERNING COUNCIL, HELD ON 18/05/2020 THROUGH VIDEO CONFERENCING FROM ROOM NO. 531, 5TH FLOOR, DRDO BHAVAN, NEW DELHI

The following were present:

Members

(i)	Dr G Satheesh Reddy, Secretary, DDR&D	Chairman
(ii)	Vice Admiral Ajendra B Singh, AVSM, VSM, DCIDS (DOT) / IDS HQ	Member
(iii)	Lt Gen Savneet Singh, YSM, SM, VSM, DG, MT / Rep, DCOAS (IS&T) IHQ of MoD (Army)	Member
(iv)	Air Marshal Amit Dev, AVSM, VSM, AOP / Air HQs	Member
(v)	Shri K S Varaprasad, DS / DG (HR), DRDO	Member
(vi)	Shri Subir Mallick, Addl FA & JS R&D	Member
(vii)	Prof. V. Ramgopal Rao, Director, IIT Delhi	Member
(viii)	Prof. R S Shevgaonkar, Vice Chancellor, Bennett University Noida	Member
(ix)	Dr. C. P. Ramanarayanan, Vice Chancellor, DIAT	Member Secretary

Invitees:

(i)	Dr. Sangeeta Kale, Dean (Acad), DIAT	Invitee
(ii)	Cmde A K Sinha (Rtd), VSM, Registrar, DIAT	Invitee
(iii)	Shri Aloke, CCE (W), DRDO	Invitee
(iv)	Dr. Vidya Gargote, Finance Officer, DIAT	Invitee
(v)	Shri H N Sahu, Joint Registrar (Admn), DIAT	Invitee

The Vice Chancellor DIAT wished all, a very good evening and welcomed the Chairman, Members and invitees to the Meeting and informed that the Agenda has been circulated among DRDO, IDS HQ and the Service HQs. He requested support of all, for the growth of the Institute and informed that all updates of the activities of the Institution and the agenda are covered in the presentation, which will follow.

With this, he requested the Chairman for his opening remarks.

Item No. 13.1

The Chairman, in his opening remarks, expressed his personal affection with the institute where he served for 7-8 months during 1985 and said that the time spent at DIAT during the above period is the golden period of his life.

He opined that even through DIAT is doing well, it must now strive to become a premier Institutions imparting technical education in the field of defence technologies. He said that he has interacted with faculty members of DIAT on three occasions and wished that DIAT will be able to complete the projects in time/implement the decisions taken during these meetings. Academic excellence should be encouraged. DIAT must continuously improve standards of imparting training/Education, quality of faculty, course curriculum. Some courses had been suggested by him which is now being introduced by DIAT. He informed that he has discussed with the Chairman AICTE regarding commencement of Course on Defence Technology.

He congratulated DIAT for developing ATULYA Microwave Sterilizer to disintegrate COVID-19 virus and also for achieving 57th position in the NIRF India Ranking 2019. He further stated that Defence Industry has to flourish in a big way under the Atmanirbhar Bharat Abhiyan of Govt of India. He wished that DIAT will be strengthened and produce quality Human Resources with cutting age technical knowledge to meet the new challenges and requirements of the defence industry.

Thereafter, Chairman directed to go ahead with the agenda.

Item No. 12.2

The following Action taken report on the decisions taken during the 12th GC meeting held on 28/02/2019 was presented:

Point No.	Issues / Agenda points discussed	Decision	Progress / Action taken
12.5.2	War gaming Course	DIAT / DRDO to pursue with CU on the content / module details, given the profile of the candidates attending the programme.	Action completed.
12.5.3	Certificate Courses as part of M. Tech.	DIAT to explore inclusion of more areas of technologies and forward the details to Services. Find out the experts in each area including those abroad and arrange to invite them to handle the modules. Explore involving facilities around for practical exposure to the attendees	1. Noted 2. Short term courses such as War gaming course, NEMP course etc are being organized based on the discussions with SHQs. 3. Any course requested by SHQs will be conducted if found feasible
12.5.4	Future location for MILIT	The Chairman directed that the present arrangements may continue.	Noted.
12.5.5	SHQs reps in Board of Studies (BoS)	Service Reps requested for curriculum content of each programme to nominate appropriate experts to be members in the BoS and intimation of the BoS in the offing well in advance.	Departments are sending information on BoS for the M.Tech Prgms to Service HQs. as and when BoS is scheduled. Reps are being deputed by Services.
12.5.6	Fee for Service Officers undergoing M.Tech & other Short Courses	Chairman directed that DIAT may intimate the SHQs and IDS about the fee for M.Tech. About the fee for short-courses, to be intimated well in advance, separately for each course, considering the duration, skill level, level of experts involved in imparting training and other logistics involved.	1. Fee for short courses is intimated separately. 2. Fee for M.Tech has been decided in a meeting Chaired by CISC and is being promulgated to all concerned under different programmes by HQ IDS
12.5.7	Payment of Rs. 4,82,099 to each individual in the case pertaining to retrenched Officers Mess Employees	The Chairman said that there is no point in evading responsibility and a timely resolution is the need of the hour. Further, the money involved is not huge. He directed that this matter be discussed between DRDO HQ & HQ IDS for speedy resolution.	In the meeting held between HQ IDS and HQ DRDO on 16th Apr 2019, it has been decided that MILIT will be made a party to the case so that the judgment of the Hon'ble court may be implemented by MILIT. No action by MILIT despite assurance of DCIDS (DOT).

12.5.8	Salwan Committee Report	Chairman directed the issue to be discussed between DRDO HQs & HQ IDS.	Action: DRDO HQ & HQ IDS
12.5.9	Approval of Audited Annual Accounts of the Institute for the year 2017-18	After going through the figures, the Governing Council approved the Audited Annual Accounts of the institute for the year 2017-18.	Action Completed Incorporated in the Annual Report for the year 2017-18 and submitted. AR tabled in Parliament.
12.6.1	Certificates to TSOC 35-38 batches	The procedure being followed by other Universities / Deemed to be Universities to be examined to arrive at a decision in accordance with UGC regulations.	Certificates issued to Army and Navy Officers. MILIT yet to submit documents for Air Force officers [even after one year].
12.6.2	New Constructions and proposed new constructions for DIAT	Projects to be completed on time.	Noted

During discussion on Fee for Service Officers for undergoing short-courses for Services, Vice Admiral Ajendra B Singh DCIDS (DOT) /HQIDS informed that Boards have been constituted and it would be appropriate if DIAT provides details of costing for short terms courses based on complexity of the course, duration, expenditure on outside experts (if any) etc, so that the same could be justified at Board level to facilitate approval by the competent authority.

While discussion on point no 7 of ATR; DCIDS (DOT) /HQIDS informed that it has already been accepted by HQ IDS in the meeting held on 16 Apr 2019 at DRDO Bhawan that DIAT should approach Hon'ble court to make MILIT as co-opted party so that MILIT can make the payment. He also informed that HQ IDS has informed MILIT to conjoin the proceedings as a co-opted party. DIAT requested HQIDS to forward a copy of the letter to MILIT in this regard. It was decided to file an affidavit to include MILIT as Party through ASG, in the High Court of Judicature at Bombay (Mumbai) in two months.

While discussion on point no 8 of ATR, it was decided to expedite the matter related to Salwan Committee report. The Chairman directed the issue to be resolved between DG (HR) & HQ IDS within one month after the lockdown restrictions are lifted.

Regarding bilateral issues, the Chairman directed that any point should be addressed in time bound manner and issue should be resolved not later than two months. If not resolved within two months, it should then be escalated to HQ DRDO and HQ IDS.

The AOP stated that he will try to arrange proper documents for submission to DIAT for award of Degree to Courses for Air Force officers to facilitate issues of degrees, as issued by DIAT to TSOC 35-38 batches of Army officers.

Item No. 13.3

Confirmation of the Minutes of the 12th Meeting of GC held on 28/02/2019:

After a brief discussion, the GC confirmed the minutes of the 12th Meeting.

Item No. 13.4

REPORTING ITEMS:

The following reporting items were presented to the GC.

➤ “ATULYA” MICROWAVE STERILIZER

- Developed by DIAT
- Sanitizes COVID-19 virus
- Light weight, hand held
- Can be used on all surfaces except metallic surface

The Vice Chancellor informed the GC that three vendors have shown interest. The Chairman appreciated for developing “ATULYA” MICROWAVE STERILIZER at the time of need, which will bring good name to DIAT/DRDO,

➤ AWARDS & RECOGNITIONS

- DIAT has been ranked 57th in National Institutional Ranking Framework [NIRF] – 2019 [earlier was ranked 63rd in 2018 and 103 in 2017]
- A team from DIAT, “DCSE_AVENGERS1” comprising six students of Computer Engineering Department won the prestigious Smart India Hackathon-2019 (an initiative of MHRD) in March 2019. The prize was given by TATA Motors and Government of India. The team was mentored by Dr. Sunita Dhavale, faculty in DIAT.
- DIAT has received Education Leadership Award for 2019, conferred by ABP News under their 10th Edition of National Education Awards for year 2019.
- Prof. K. P. Ray (Professor and Dean (SR)) was awarded IETE-Ram Lal Wadhwa Award 2018 for outstanding seminal contributions in micro strip/planar antennas resulting in extensive publications.
- Prof. K. Balasubramanian (Prof. and Dean (SA)) was awarded 8th National Award for Technology Innovation in Petrochemicals and Downstream Plastic Processing Industry, from Ministry of Chemical and Fertilizers, Government of India, 2018
- Dr. Sangeeta Kale (Prof. and Dean (Acads)) was awarded the Women Scientist Award by “Sharada Shakti” (Vigyan Bharati) in 2019.

The Chairman, GC expressed his happiness for Awards and recognition and achievements of DIAT. However, he stressed upon the need of very good faculty for the emerging area of Engineering and Technology. Director IIT Delhi, Prof. V Ramgopal Rao suggested that DIAT should emerge out as an unique institution in Defence Technology and related areas. He also insisted that faculty should be encouraged to publish research papers in identified 4 to 5 peer reviewed good quality journals only. He suggested preparing a methodology to identify and engage good faculty from abroad. It was also suggested to establish Chairs, to be sponsored by DRDO, Services and DPSUs. Prof V. Ramgopal Rao suggested that DIAT should plan a strategy for branding and attracting good students which is possible by having good Laboratories, good faculty credentials, offering defence related projects, and latest curriculum. Prof Shevgaonkar suggested for front line research funding and also generously funding for Center of Excellence.

Chairman directed DIAT to work out plan to attract good faculty and establish Chairs.

[Action: DIAT]

➤ **Notable conferences, Short / Customized Courses conducted**

- 6 weeks customized course on Missile Technology for BDL Executives.
- Short program on Artificial Intelligence, Data Science for the DRDO Scientists and Ordnance Factory Executives
- Short program on NMR (Nuclear Magnetic Resonance Operation & Analysis) for DRDO Scientists
- Short course on Wargaming for Naval Officers
- International Symposium on Quantum Information Technology (ISQIT)
- Active Learning in Optics and Photonics (ALOP) - in collaboration with UNESCO, ICTP and SPIE.
- High Power Lasers – for Bharat Electronics Limited
- Customized course on Missile Technology for BrahMos
- Indian Ordnance Factory Staff Officers Course

➤ **Talks conducted at DIAT**

- DIAT conducts lectures by various eminent personalities from Tri-Services, DRDO and Academic Institutions as a part of its Distinguished Faculty Lecture Series (DFLS), throughout the year.
- Lt. Gen. D.B. Shekatkar (Retd), Lt. Gen. V.J. Sundaram (Retd), Dr. Rajaram Nagappa, Dr. Amol Gokhale, Dr. Anil Sahasrabudhe, were a few such speakers during 2019.

➤ **Establishment of Schools and new M.Tech. Programmes**

DIAT is currently running 13 M.Tech. Programmes with 25 specializations. New programmes recently started are

- a) Robotics
- b) Artificial Intelligence
- c) Data Science
- d) Quantum Technology (First Institute in India to offer M.Tech Program)

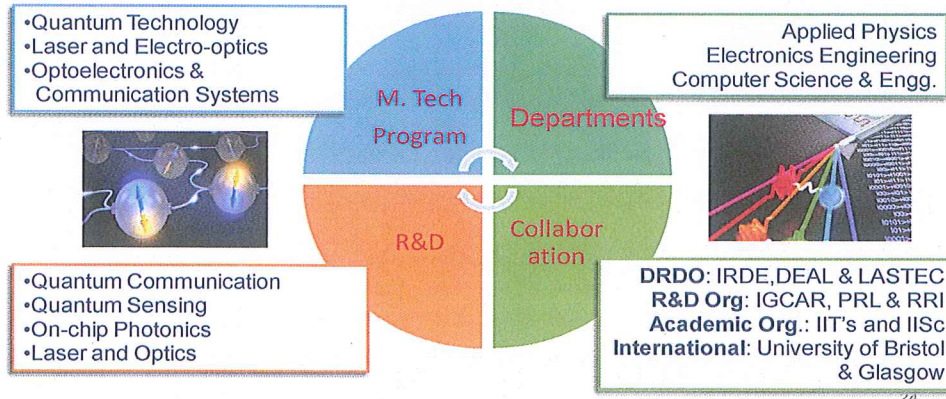
DIAT has started Schools in three different important domains for encouraging interdisciplinary research and teaching

- a) School of Advanced Research in Robotics
- b) School for Quantum Technologies
- c) School of Defence Technology

Details are being worked out and these three Centers will commence with their research programme in the academic year 2020-21.

School of Quantum Technologies

- **Quantum Technology** is an emerging field of physics and engineering
- **Quantum Technology** offers ultra high speed computing power and secure communication
- **Quantum Technology** enables scientist and engineers to make Quantum-based applications
- **DIAT** will be the first academic institute in India who will offer M Tech in **QT** course



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School of Advanced Research In Robotics

Goal is to develop innovative solution based interdisciplinary research platform to achieve academic and research excellence for next generation through involvement of -

Mech Engg Dept, Electronics Dept Computer science Applied Physics
Applied Mathematics Robotics Industries Institutes(in India and abroad)

Components



FULL TIME
MTECH,PHD
COURSES



ONLINE TASK
BASED
MODULES



CERTIFIED
INTERNSHIP
COURSE



ROBOT
RESEARCH
CENTER

Salient Features of School

- **Full time M.Tech and PhD courses**
- **Short term courses on trending Robotics topics**
- **Paid online task-based certification courses on Robot kit for members**
- **Certified Internships providing platform for outstation students**
- **Robot research center with state of an art equipments of Robotics**

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➤ Infrastructure / Equipment support received from DRDO

- Battle Field Surveillance Radar (BFSR) – LRDE, Bangalore
- EMI-EMC Chamber – LRDE, Bangalore
- Identification, Friend or Foe (IFF-Radar) – CABS, Bangalore
- RF Passive/active components - LRDE, Bangalore received

➤ Infrastructure / equipment support from ISRO

- 02 IRNSS (Indian Regional Navigation Satellite System) receivers

➤ M.Tech Students Strength, at a glance

PROGRAMME	2016-18	2017-19	2018-20	2019-21
M Tech	244	270	262	224

➤ **M. Tech 2019- 21 Batch**

ACADEMIC YEAR	ARMY	NAVY	AIR FORCE	DRDO	ICG	SCHOLARSHIP	SPONSORED	FOREIGN	TOTAL
2019-21	17	19	21	16	6	124	21	0	224
2018-20	22	25	25	21	11	122	34	2	262

During the presentation, the Vice Chancellor requested HQIDS to depute more number of Service officers for undergoing M Tech Courses at DIAT.

➤ **PhD / MS [By Research] Strength**

PROGRAMME	2016	2017	2018	2019
PhD	22	15	21	37
MS	-	01	02	01

➤ **Details of Academic Achievements**

Number of research papers published in peer reviewed journals by faculty	939 [Since – 2015]
Number of Books published by the faculty	39 [Since 2016]
Number of Research Projects completed	19 [Since 2016] [11 ongoing]
Number of conferences and workshops organized	64 [Since 2015]

Prof V. Ramgopal Rao, suggested that Research Papers may be published in the top quality journals and should not be published in paid journals. Prof. V. Ramgopal Rao, also suggested to attract professors with excellent track record as faculty in DIAT.

[Action: DIAT]

➤ **Patents**

Year	No of Patents
2016	13
2017	05
2018	05
2019	08

➤ **Other Events**

11th Convocation held on 30th May, 2019. Dr. G Satheesh Reddy, Secretary, DD R&D and Chairman, DRDO presided over the convocation [249 M Tech degrees (2017- 19 batch) and 16 PhD degrees were awarded during the 11th Convocation Ceremony]

Item No. 13.5

Agenda for Discussion:

13.5.1 Audited Statements of Accounts for the year 2018-19

Following audited statements of accounts for the year 2018-19 was presented for considered and approval:

- A) Balance Sheet
- B) Income and Expenditure A/c

BALANCE SHEET AS ON 31st March

PARTICULARS	31.03.2019	31.03.2018
SOURCES OF FUNDS		
CORPUS/ CAPITAL FUND	74.09	67.81
EARMARKED (SPONSORED PROJECT) FUNDS	1.14	1.02
CURRENT LIABILITIES AND PROVISIONS	4.48	4.68
TOTAL	79.71	73.52
APPLICATION OF FUNDS		
FIXED ASSETS :		
GROSS BLOCK	93.51	86.98
LESS : DEPRECIATION	53.81	47.47
NET BLOCK	39.70	39.52
CAPITAL WORK IN PROGRESS	0.19	0.09
CURRENT ASSETS	20.18	20.10
LOANS AND ADVANCES	2.01	1.48
INCOME AND EXPENDITURE ACCOUNT	17.63	12.33
TOTAL	79.71	73.52

INCOME EXPENDITURE ACCOUNT (Rs. in Crores)

PARTICULARS	31.03.2019	31.03.2018
INCOME		
Academic Receipts	2.01	1.77
Interest Earned	0.84	0.95
Miscellaneous Income	0.82	1.26
Grants for Revenue Expenditure	25.78	30.12
Excess of Expenditure over Income	5.29	3.47
TOTAL	34.74	37.56
EXPENDITURE		
Establishment Expenses	18.27	16.97
Administrative Expenses	7.70	10.65
Academic Expenses	2.43	3.57
Depreciation	6.34	6.36
TOTAL	34.74	37.56

Decision: After brief discussion, the GC approved the Audited Statements of Accounts for the year 2018-19

13.5.2 Annual Report for the year 2018-19

It was informed that the Annual Reports for the year 2018-19 was submitted for tabling in the parliament, with the approval of the Hon'ble RM, on file. GC was requested to consider and pass the resolution on the Annual Reports, as required vide Para 7(b) of DIAT Society Document.

Decision: GC ratified the Annual Report for the year 2018-19.

AGENDA POINTS FROM INDIAN NAVY

13.5.3 Programming Languages like Python, Matlab and C++ etc may be included in Course Curriculum of M.Tech (Modelling and Simulation)

The Board of Studies (BoS) meeting for all courses / programmes are held periodically for which, SHQ Reps are invited to attend. Any suggestions with respect to the course curriculum can be given in BoS

Decision: The Chairman directed that the request may be considered by DIAT on recommendations of the appropriate academic bodies i.e. BoS and PGC.

[Action: DIAT]

13.5.4 Requirement of at least 10 Officer for any customised Short Course under MoU

It was brought to the notice that proposals for conduct of Short terms courses are made to DIAT, but number of Officers, being deputed for the course is on many occasions less than 10 Nos. Running a highly specialised course for less than 10 officers is not feasible administratively.

Decision: The Chairman directed that DIAT will conduct short terms courses for a minimum 10 Nos of officers and it will be responsibility of the sponsoring agency to ensure minimum number of participants for the course sponsored by them.

[Action: DRDO/Services]

AGENDA POINTS FROM HQ IDS

13.5.5

- 1 Revival of Restructured Implementation Committee meeting
- 2 Transfer of 240 Posts from DRDO to MILIT
- 3 Posting / transfer of DRDO Employees
- 4 Allotment of Bungalows
- 5 Revision of Fee Structure for M.Tech
- 6 NoC for AMWP projects by DRDO HQ
- 7 Non-Implementation of Award of Labour Court

VC brought out that

- a) Sl. 1, 4, and 7 are bilateral issues between DIAT and MILIT.
- b) Sl 2, 3, 6 are bilateral issues between HQ IDS and DRDO HQ and are to be resolved bilaterally.
- c) Sl. 2, 3 and 7 were already discussed in meeting Co-chaired by Secretary and CISC on 16/04/2019. Decisions of the meeting to be implemented.

DCIDS (DOT) stated that these issues are pending resolution for a long time and must be resolved in a time bound manner.

M.Tech fee


- a) Resolved in the meeting chaired by CISC on 22/04/2020, following agreed upon:
- b) No fee to be charged up to Dec 2019
- c) From Jan 2020 onwards, students selected under different programs of 2019-21 batches and all other subsequent batches will be informed to pay Rs. 50,000/- per officer per semester

- d) HQ IDS will ensure that fee for Jan – May 2020 semester will be paid by the Students before commencement of Exam
- e) HQIDS / Service HQs are to issue necessary orders to this effect, at the earliest.

[Action: HQ IDS]

As far as remaining points are concerned, these are to be resolved between DIAT and MILIT within two months. If these are not done within the given time the decision will be taken at New Delhi, in a meeting between DRDO and HQIDS. Chairman requested DG(HR)/ DRDO and DCIDS(DOT)/ HQIDS to ensure time bound resolution so that an amicable atmosphere is maintained between DIAT and MILIT.

In the absence of any other point, the meeting concluded with thanks to the Chair.


(Dr C P Ramanarayanan)
Vice Chancellor, DIAT &
Member Secretary, GC