



## Indian Institute of Technology Indore

Minutes of the 44<sup>th</sup> meeting of the Senate held on 09 July 2024 (Tuesday) 15.00 hrs. at Maitreyi Seminar Hall, IIT Indore.

Following members attended the meeting:

Chairperson		
1	Prof. Suhas S. Joshi	Director, IIT Indore
Deans		
2	Prof. Vipul Singh	Dean, Academic Affairs
3	Prof. Sandeep Chaudhary (present online)	Dean, Administration
4	Prof. Avinash Sonawane (present online)	Dean, International Relation
5	Prof. Manish Kumar Goyal	Dean, Infrastructure Development
6	Prof. Srivathsan Vasudevan	Dean, Student Affairs
7	Prof. Devendra L. Deshmukh	Dean, Educational Outreach
Head of Departments		
8	Dr. Abhishek Rajput	HoD, Civil Engineering
9	Prof. Vivek Kanhangad	HoD, Electrical Engineering
10	Prof. Shanmugam Dhinakaran (present online)	HoD, Mechanical Engineering
11	Dr. Ajay Kumar Kushwaha	HoD, Metallurgical Engineering and Materials Science
12	Prof. Amit Kumar	HoD, Biosciences and Biomedical Engineering
13	Dr. Manoneeta Chakraborty	Acting HoD, Astronomy, Astrophysics and Space Engineering
14	Dr. Vijay Kumar Sohani (present online)	Acting HoD, Mathematics
15	Prof. Preeti A. Bhobe	HoD, Physics
16	Prof. Ruchi Sharma	HoD, Humanities and Social Sciences
Professors		
17	Prof. Abhinav Kranti (present online)	Electrical Engineering
18	Prof. Vimal Bhatia (present online)	Electrical Engineering
19	Prof. Rajneesh Misra (present online)	Chemistry
20	Prof. Sarika Jalan (present online)	Physics
21	Prof. Sandeep Chaudhary (present online)	Civil Engineering
22	Prof. Avinash Sonawane (present online)	Biosciences and Biomedical Engineering



23	Prof. Vipul Singh	Electrical Engineering
24	Prof. Prabhat Kumar Upadhyay (present online)	Electrical Engineering
25	Prof. Manish Kumar Goyal	Civil Engineering
26	Prof. Bhupesh Kumar Lad (present online)	Mechanical Engineering
27	Prof. Dhinakaran Shanmugam (present online)	Mechanical Engineering
28	Prof. Aruna Tiwari (present online)	Computer Science and Engineering
29	Prof. Amit Kumar (present online)	Biosciences and Biomedical Engineering
30	Prof. Prashant Kodgire (present online)	Biosciences and Biomedical Engineering
31	Prof. Sk. Safique Ahmad (present online)	Mathematics
32	Prof. Sampak Samanta	Chemistry
33	Prof. Nirmala Menon	Humanities and Social Sciences
34	Prof. Ruchi Sharma	Humanities and Social Sciences
35	Prof. Preeti Anand Bhohe	Physics
36	Prof. Parasharam M. Shirage	Metallurgical Engineering and Materials Science
37	Prof. Raghunath Sahoo (present online)	Physics
38	Prof. Amod C. Umarikar	Electrical Engineering
39	Prof. Vivek Kanhangad	Electrical Engineering
40	Prof. Srivathsan Vasudevan	Electrical Engineering
41	Prof. Devendra L. Deshmukh	Mechanical Engineering
42	Prof. Pankaj Ramesh Sagdeo	Physics
43	Prof. Ankhi Roy	Physics
44	Prof. Mobin Shaikh (present online)	Chemistry
45	Prof. Kiran Bala (present online)	Biosciences and Biomedical Engineering
46	Prof. Anirban Sengupta (present online)	Computer Science and Engineering
47	Prof. Neminath Hubballi (present online)	Computer Science and Engineering
48	Prof. Rupesh Shivaji Devan	Metallurgical Engineering and Materials Science
49	Prof. Antony Vijesh Villavarayan	Mathematics
50	Prof. Kazi Sabiruddin	Mechanical Engineering
<b>Other Authorities</b>		
51	Dr. Jayaprakash Murugesan (present online)	Chief Warden
52	Dr. Anand Petare	Workshop Superintendent, Central Workshop
<b>Special Invitees</b>		
53	Dr. Hemant Borkar (DUGC Convener, MEMS)	Metallurgical Engineering and Materials Science
54	Mr. Neeraj Kumar	Deputy Registrar, Academic Affairs
55	Mr. Tapesh Parihar	Section Officer, Academic Office
<b>Secretary</b>		

56	Mr. S. P. Hota	Registrar, IIT Indore
<b>Leave of absence</b>		
57	Prof. Himanshu Rai	Director, IIM Indore
58	Dr. Unmesh D. Malshe	Director, RRCAT
59	Prof. Abhiram G. Ranade	Professor, Department of Computer Science and Engineering, IIT Bombay
60	Prof. I. A. Palani	Dean, Research and Development
61	Prof. Suman Mukhopadhyay	Dean, Alumni and Corporate Relations
62	Prof. Abhishek Srivastava	Dean, Faculty Affairs
63	Dr. Ranveer Singh	HoD, Computer Science and Engineering
64	Prof. Tushar Kanti Mukherjee	HoD, Chemistry
65	Prof. Narendra S. Choudhary	Computer Science and Engineering
66	Prof. Neelesh Kumar Jain	Mechanical Engineering
67	Prof. Anand Parey	Mechanical Engineering
68	Prof. Ram Bilas Pachori	Electrical Engineering
69	Prof. Suman Mukhopadhyay	Chemistry
70	Prof. Subhendu Rakshit	Physics
71	Prof. Krushna R. Mavani	Physics
72	Prof. G. S. Murthy	Biosciences and Biomedical Engineering
73	Prof. Santosh Kumar Vishvakarma	Electrical Engineering
74	Prof. Shaibal Mukherjee	Electrical Engineering
75	Prof. Trapti Jain	Electrical Engineering
76	Prof. Mukesh Kumar	Electrical Engineering
77	Prof. Neelima Devarakonda Satyam	Civil Engineering
78	Prof. I. A. Palani	Mechanical Engineering
79	Prof. Santosh Kumar Sahu	Mechanical Engineering
80	Prof. Ritunesh Kumar	Mechanical Engineering
81	Prof. Abhishek Srivastava	Computer Science and Engineering
82	Prof. Kapil Ahuja	Computer Science and Engineering
83	Prof. Abhirup Datta	Astronomy, Astrophysics and Space Engineering
84	Prof. Apurba Kumar Das	Chemistry
85	Prof. Sanjay Kumar Singh	Chemistry
86	Prof. Biswarup Pathak	Chemistry
87	Prof. Pritee Sharma	Humanities and Social Sciences
88	Prof. Rajesh Kumar	Physics
89	Prof. Sudeshna Chattopadhyay	Physics
90	Prof. Swadesh Kumar Sahoo	Mathematics
91	Prof. Somaditya Sen	Physics
92	Prof. Tushar Kanti Mukherjee	Chemistry



93	Prof. Anjan Chakraborty	Chemistry
94	Prof. Satya Silendra Bulusu	Chemistry
95	Prof. Chelvam Venkatesh	Chemistry
96	Prof. Mirza Saqib Baig	Biosciences and Biomedical Engineering
97	Prof. Santosh Sattappa Hosmani	Metallurgical Engineering and Materials Science
98	Prof. Niraj Kumar Shukla	Mathematics
99	Prof. Satyajit Chatterjee	Mechanical Engineering
100	Prof. Pavan Kumar Kankar	Mechanical Engineering
101	Dr. Sharad Gupta	Convener, Health Center Advisor Committee
102	Dr. Mohanasundari Thangavel (DUGC Convener, HSS)	Humanities and Social Sciences
103	General Secretary, Student Gymkhana	Ex-officio
104	Academic Secretary, Student Gymkhana	Ex-officio

**ITEM 44.1: Welcome and Opening remarks by the Chairperson, Senate.**

The Chairperson, Senate welcomed all the members to the meeting. He announced two new Gold Medals from Convocation 2025 onwards:

1. Award of Gold Medal for the best PhD dissertation in Engineering by Prof. G.S Murthy to honour the legacy of his father's distinguished service in the Central Water Commission, Govt. of India.
2. Award of Gold Medal to a Female Ph.D. student for research excellence by Prof. Kiran Bala in memory of her role model/motivator, a great historian, researcher and author, Prof. Agam Prasad Mathur (1930-2023).

The Chairperson also announced the opening of two new Centres:

1. Centre for Narmada River Basin Management by Prof. Manish Kumar Goyal as Convener
2. Centre for Pedagogy and curricular excellency by Prof. Amod C. Umarikar as Convener.

The Chairperson was pleased to share the Institute QS ranking of the Institute. This year QS ranking is 477 which is top 11<sup>th</sup> position among the Indian institutions.

**ITEM 44.2: Confirmation of the minutes of the 43<sup>rd</sup> meeting of Senate held on 15 May 2024.**

The Senate confirmed the final minutes of its 43<sup>rd</sup> meeting of Senate held on 15 May 2024.



**ITEM 44.3: Action Taken Report (ATR) on minutes of 43<sup>rd</sup> meeting of Senate held on 15 May 2024.**

The Senate noted the actions taken on the decisions of the 43<sup>rd</sup> meeting of Senate held on 15 May 2024.

**ITEM 44.4: List of students who have completed all the prescribed requirements for the award of degree during 12<sup>th</sup> Convocation of the Institute.**

The Senate recommended to confer the award of degrees to 659 listed students during the 12<sup>th</sup> Convocation of the Institute.

Program	Department	F	M	Grand Total
<b>B.Tech.</b>	Civil Engineering	11	39	50
	Computer Science & Engineering	16	65	81
	Electrical Engineering	18	58	76
	Mechanical Engineering	15	62	77
	Metallurgical Engineering and Materials Science	10	34	44
<b>Total</b>		<b>70</b>	<b>258</b>	<b>328</b>
<b>M.Sc.</b>	Astronomy, Astrophysics and Space Engineering	3	7	10
	Biosciences and Biomedical Engineering	13	3	16
	Chemistry	7	18	25
	Mathematics	6	12	18
	Physics	3	22	25
<b>Total</b>		<b>32</b>	<b>62</b>	<b>94</b>
<b>M.Tech.</b>	Astronomy, Astrophysics and Space Engineering	1	3	4
	Center for Electric Vehicles And Intelligent Transport Systems	0	3	3
	Electrical Engineering	4	9	13
	Mechanical Engineering	2	20	22
	Metallurgical Engineering and Materials Science	1	11	12
<b>Total</b>		<b>8</b>	<b>46</b>	<b>54</b>
<b>MS (Research)</b>	Computer Science & Engineering	2	2	4
	Electrical Engineering	1	5	6
	Humanities & Social Sciences	2	0	2
	Mechanical Engineering	0	5	5



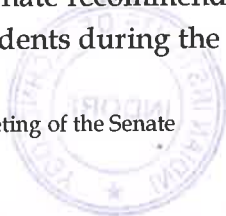
	Space Science and Engineering	1	2	3
	<b>Total</b>	<b>6</b>	<b>14</b>	<b>20</b>
<b>MSDSM</b>	MSDSM	18	66	84
	<b>Total</b>	<b>18</b>	<b>66</b>	<b>84</b>
<b>MScPhD</b>	Physics	1	0	1
	<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>MTPHD</b>	Mechanical Engineering	0	2	2
	Metallurgical Engineering and Materials Science	0	3	3
	<b>Total</b>	<b>0</b>	<b>5</b>	<b>5</b>
<b>PhD</b>	Astronomy, Astrophysics and Space Engineering	3	4	7
	Biosciences and Biomedical Engineering	2	3	5
	Chemistry	6	7	13
	Civil Engineering	1	6	7
	Computer Science & Engineering	2	2	4
	Electrical Engineering	1	9	10
	Humanities and Social Sciences	3	2	5
	Mathematics	0	2	2
	Mechanical Engineering	1	10	11
	Metallurgical Engineering and Materials Science	2	3	5
	Physics	2	2	4
	<b>Total</b>	<b>23</b>	<b>50</b>	<b>73</b>
	<b>Grand Total</b>	<b>158</b>	<b>501</b>	<b>659</b>

It was informed that there are 14-15 students who are likely to be graduated latest by 11 July 2024. An additional list of such students will be put to the Chairman Senate for recommendation, and it will be reported in the next meeting of the Senate.

The same must be put up for approval of BoG of the institute.

**Agenda: 44.5: List of recipients of medals and awards for the 12<sup>th</sup> Convocation of the Institute**

The Senate recommended presenting the medals and awards to following listed awardees students during the 12<sup>th</sup> Convocation of the Institute.



S. No.	Title of the Award	Roll No.	Student Name	Department	Program
1	The President of India Gold Medal	200001050	Mr. Mukul Jain	CSE	B.Tech.
2	Institute Silver Medals (UG Programs)	200001077	Mr. Vankayalapati Sai Venkata Satwik	CSE	B.Tech.
3		200002025	Mr. Daftari Dev Shimulbhai	EE	B.Tech.
4		200003011	Mr. Amit Vikrant Dhavale	ME	B.Tech.
5		200004033	Ms. Nitya Chourasiya	CE	B.Tech.
6		200005018	Mr. Jitin Sathish Kumar	MEMS	B.Tech.
7		Institute Silver Medals (PG Programs)	2202105001	Mr. Rishav Sharma	MEMS
8	2203121006		Ms. Krishangi Kashyap	AASE	M.Sc.
9	Institute Gold Medal (for Best All-Round Performance 2024)	200004001	Mr. Abhinav Yadav	EE	B.Tech.
10	Buti Foundation Gold Medal	2203121006	Ms. Krishangi Kashyap	AASE	M.Sc.
11	VPP Menon Gold Medal	1701171015	Ms. Kanchan Samadhiya	BSBE	Ph.D.
12	MSDSM Silver Medals	2104107031	Mr. Sebastian P S	MSDSM (Batch 1)	
13		2204107020	Mr. Divyansh Dubey	MSDSM (Batch 2)	
14	Best B.Tech. Project	200002069	Mr. Saurabh Kichouliya	EE	B.Tech.

The same must be put up for approval of BoG of the institute.

**ITEM: 44.6: Revised curriculum and course syllabus of the B.Tech. in Metallurgical Engineering and Materials Science as per the NEP 2020.**

The Head of Department, Metallurgical Engineering and Materials Science presented the revised curriculum and course syllabus of the B.Tech. in Metallurgical Engineering and Materials Science as per the NEP 2020 which were discussed in the 42<sup>nd</sup> meeting of the Senate held on 17 April 2024.



<b>3<sup>rd</sup> Semester</b>			
<b>Course Code</b>	<b>Course Name</b>	<b>(L-T-P)</b>	<b>Credit</b>
ZZXXX	Course -I for minor program	X-X-X	3
MA 205	Complex Analysis	3-1-0 (Half Semester)	2
MA 207	Differential Equations II	3-1-0 (Half Semester)	2
MM 2XX	Structure of Materials	2-1-0 (Half Semester)	1.5
MM 2XX	Physics of Materials	2-1-0 (Half Semester)	1.5
MM 2XX	Mechanical Behaviour of Materials	2-1-0	3
MM 2XX	Transport Phenomena	2-1-0	3
MM 2XX	Thermodynamics of Materials	2-1-0	3
MM 2XX	Metallography Lab	0-0-2	1
MM 2XX	Mechanical Behaviour of Materials Lab	0-0-2	1
MM 2XX	Department Elective - I	2-1-0	3
		<b>13-6-4</b>	<b>21/24</b>

<b>Elective Courses (3<sup>rd</sup> Semester)</b>			
<b>Course Code</b>	<b>Course Name</b>	<b>(L-T-P)</b>	<b>Credit</b>
MM 2XX	Finite Element Simulations in Materials Engineering	2-1-0	1.5
MM 2XX	Statistical Mechanics for Materials Science	2-1-0	1.5
MM 2XX	Materials Economics and Sustainability	2-1-0	1.5
MM 2XX	Nucleation and Crystal Growth	2-1-0	1.5





4 <sup>th</sup> Semester			
Course Code	Course Name	(L-T-P)	Credit
ZZXXX	Course -II for minor program	X-X-X	3
MA 204N	Numerical Methods	2-0-2	3
MM 2XX	Casting and Welding Technology	2-1-0 (Half Semester)	1.5
MM 2XX	Powder Metallurgy and Additive Manufacturing	2-1-0 (Half Semester)	1.5
MM 208	Theory of Metal Forming	2-1-0	3
MM 2XX	Physical Metallurgy	2-1-0	3
MM 2XX	Materials Characterization	2-0-2	3
MM 2XX	Casting and Welding Technology Lab	0-0-2	1
MM 2XX	Metal Forming Lab	0-0-2	1
MM 2XX	Department Elective - II	2-1-0	3
ZZ XXX	Institute open elective - I	2-1-0	3
		<b>14-5-8</b>	<b>23/26</b>

Elective Courses (4 <sup>th</sup> Semester)			
Course Code	Course Name	(L-T-P)	Credit
MM 2XX	Materials Informatics	2-1-0	1.5
MM 2XX	Ceramic Science and Technology	2-1-0	1.5
MM 2XX	Diffusion in Solids	2-1-0	1.5
MM 2XX	Thin Film Technology	2-1-0	1.5

After thorough deliberations, the Senate approved the above-mentioned course structure and resolved the following syllabi of the courses with the remarks as mentioned against each course.

Course Code	Course Name	L-T-P-C	Senate Remarks:
MM 219	Thermodynamics of Materials	2-1-0-3	Approved
MM 2XX	Metallography Lab	0-0-2-1	Approved
MM 2XX	Materials Characterization	2-0-2-3	Approved
MM 2XX	Casting and Welding Technology	2-1-0-1.5 (Half Semester)	Approved
MM 2XX	Powder Metallurgy and Additive Manufacturing	2-1-0-1.5 (Half Semester)	Approved with suggestion to revise the name of reference book SI. No-5 with latest volume
MM 217	Physical Metallurgy	2-1-0-3	Approved
MM 2XX	Casting and Welding Technology Lab	0-0-2-1	Approved with suggestion to change the word 'form' to 'foam' in course content.



MM 2XX	Nucleation and Crystal Growth	2-1-0-1.5 (Half Semester)	Approved with suggestion to remove the pre-requisite and shift the text book no-2 to reference book 3.
MM 2XX	Ceramic Science and Technology	2-1-0-1.5 (Half Semester)	Approved with suggestion to shift the text book no-2 to reference book 3.
MM 2XX	Diffusion in Solids	2-1-0-1.5 (Half Semester)	Approved
MM 2XX	Thin Film Technology	2-1-0-1.5 (Half Semester)	Approved

**ITEM: 44.7: Revised course syllabus of one course of the B.Tech. in Mechanical Engineering as per the NEP 2020.**

After thorough deliberations, the Senate approved the syllabi of course ME 214: Introduction to Additive Manufacturing {2-1-0-3 (1.5 cr. Half Semester)}.

**ITEM 44.8: Revised minor programs of the School of Humanities and Social Sciences.**

The Head of School of Humanities and Social Sciences presented the revised minor programs of the School of Humanities and Social Sciences. In response to NEP and change in the structure as passed during the 36th Meeting of Senate, the School of HSS has revised the Minor Program structure of Economics Minor as given below:

	Economics Minor	Remarks:
M1	HS 209: Intermediate Microeconomics	Already approved courses
M2	HS 210: Indian Economy	Already approved courses
M3	HS 323: International Economics	Already approved courses
	HS 321: History of Modern Indian Business	Already approved courses
M4	HS 325: Industrial Organization	Already approved courses but shifted from Autumn Semester to Spring Semester.
M5	Minor project/field study/white paper/domain comprehension (Seminar/lab course)	-

<b>Liberal Arts Minor</b>		
M1	HS 2XX: Fundamentals of Linguistics (3-0-0-1.5) (Half Semester)	Approved
	HS 2XX: Language Variation: Culture and Society (3-0-0-1.5) (Half Semester)	Approved
	HS 205: Sociology	Already approved
	HS 211: German Literature and Culture Studies	Already approved
	HS 2XX: Psychology	Already approved
	HS 212: History of India after Independence, 1947-2000	Already approved
M2	HS 2XX: Contemporary Short Fiction (3-0-0-3)	Approved
	HS 206: Paradigms and Turning Points	Already approved
	HS 2XX: Sociology of Cinema (2-1-0-3)	Approved
	HS 214: History of Indian Culture and Civilization	Already approved
	HS 213: Cognitive Psychology	Already approved
M3	HS 341: Appreciating Indian English Literature	Already approved
	HS 327: Mind, Action and Technology	Already approved
	HS 311: Life and Thought of Gandhi	Already approved
M4	HS 3XX: Philosophy and Film (3-0-0-3)	Approved
	HS 315: Sociology of Science and Technology	Already approved
	HS 3XX: Graphic Literature (3-0-0-3)	Approved
M5	Minor project/field study/white paper/domain comprehension (Seminar/lab course)	-

In Addition to the minor programs, the Senate approved the syllabus of following two courses of the School of Humanities and social sciences:

<b>Course Code</b>	<b>Course name</b>	<b>L-T-P-C</b>
HS 4XX/ HS 6XX	Indian Cinema: Nation, Region and Technology	2-1-0-3
IHS 402	The West in Twentieth Century: Critical Perspectives	3-0-0-3



**ITEM 44.9: Grade to percentage conversion certificate**

At present the institute issues semester grade report and on its back side there is mention about the system of evaluation and award of degree. However, the mention about CPI to percentage is highly ambiguous. Hence to make it clear the Senate deliberated and resolved that the following be mentioned on the back side of the semester grade report of students w.r.t. CPI to percentage conversion.

**“The Institute awards cumulative performance index (CPI) on a scale of 10.00, and the same can notionally be converted to percentage by simply multiplying with a factor of 10. In cases of employment or requirement by any external body/institute, a CPI of 6.00 or above is to be considered as first class”**

**ITEM: 44.10: Modifications in the format of semester grade sheet.**

Four new branches have been introduced from AY 2023-24. In some of these departments the UG program name is different from the name of department, e.g. B. Tech. is offered in Engineering Physics by the Department of Physics. To resolve this issue, Senate deliberated and approved the following: -

In place of Program there was only a mention of B. Tech. on the semester grade report the Senate resolved that in the Program field must carry mention of program name explicitly. E.g. for an Engineering Physics student, the grade report would mention program name as “B. Tech. in Engineering Physics”. This change will be effective for all UG batches admitted in or after AY 2023-24.

**ITEM 44.11: Adoption of new Academic Standing Policy for all UG students.**

As per Senate resolution no 36.4, dated 30<sup>th</sup> November 2023 the new academic standing policy was adopted for all UG batches admitted from AY 2023-24 onwards. However, for the remaining students belonging to previous UG batches as well this policy would be helpful. It would also be helpful for the integration of the same on the AROL.

The Senate deliberated over and approved the same w.e.f. 9 July 2024 for students belonging to all UG batches.

**ITEM: 44.12: Amendments in the basis to award The President of India Gold Medal and Institute Silver Medals of UG programs.**

Initially till the B.Tech. Batch -2014, the President of India Gold Medal and Institute Silver medal awards were given based on CPI. However, in the 9<sup>th</sup> Senate meeting held on 05.08.2015 and 15<sup>th</sup> meeting held on 19.06.2018, it was decided to honor the credits earned in minor courses as well towards these awards. In this context, as per Senate resolution no- 9.9 and Senate resolution no-15.8, the basis of award of these medals was changed to cumulative grade points.

However, it is observed that students enrolled under B.Tech. programs having higher credits or those doing minor courses are at a distinct advantage, owing to the larger no. of credits being earned. To provide a level playing field to all students, it was

resolved after deliberations to use overall CPI as the basis for these awards, the credits for which can be based on major or major along with minor or major along with additional learning courses (as applicable).

The Senate also suggested to make these changes applicable from 2023 B.Tech. batch onwards, who are going to begin their minor courses from 25 July 2024.

The Senate deliberated and approved the same.

**ITEM 44.13: Items for Information:**

**44.13.1: Approval regarding conversion of award for Best All-Round Performance from Institute Silver Medal to Institute Gold Medal.**

The Senate approved the same.

**44.13.2: Course mapping of 1<sup>st</sup> year and 2<sup>nd</sup> year course of old and new curriculum of B.Tech. programs.**

The Senate approved the same.

**44.13.3: Modifications in the format of degree certificate.**

The Senate approved the same.

**ITEM 44.14: Any other item with the permission of the Chair.**

**44.14.1: Award of Silver Medal for the students of MS in Data Science and Managements (MSDSM) program.**

The Senate approved the same.

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



(Professor Suhas S. Joshi)  
Director and Chairperson, Senate



(Mr. S. P Hota)  
Registrar and Secretary, Senate

