

विश्वेश्वरय्या राष्ट्रीय प्रौद्योगिकी संस्थान नागपूर - 440010

VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY, NAGPUR - 440 010

MINUTES OF THE MEETING OF 64th SENATE HELD IN THE SENATE HALL OF VNIT, NAGPUR ON FRIDAY THE 31st DECEMBER, 2021 AT 4.00 PM.

The 64th Meeting of the Senate was held 31st December, 2021 at 4.00 PM in the Senate Hall of VNIT, Nagpur.

The following members were present:

S. N.	Name of Senate Members	Designation / Department	
1.	Prof. Pramod M. Padole	Director, VNIT, Nagpur	Chairman
2.	Dr. Abhay.S. Gandhi	Dean (Academic), VNIT, Nagpur	Member
3.	Dr. J.D. Ekhe	Dean (Planning & Development), VNIT, Nagpur	Member
4.	Dr. Dilip.H. Lataye	Dean (Students Welfare), VNIT, Nagpur.	Member
5.	Dr. (Smt.) Madhuri A. Chaudhari	Dean (Research & Consultancy), VNIT, Nagpur	Member
6.	Dr.L.M.Gupta	Head, Dept. of Applied Mechanics, VNIT, Nagpur.	Member
7.	Dr.Akshay P Patil	Head, Dept. of Architecture & Planning, VNIT, Nagpur.	Member
8.	Dr. (Smt.) Anupama Kumar	Head, Dept. of Chemistry, VNIT, Nagpur	Member
9.	Dr. G. N. Nimbarte	Head, Dept. of Humanities, VNIT, Nagpur.	Member
10.	Dr. Jatin Bhatt	Head, Dept. of Metallurgical & Materials Engg., VNIT, Nagpur	Member
11.	Dr. I.L. Muthreja	Head, Dept. of Mining Engg., VNIT, Nagpur.	Member
12.	Dr.Y.B. Katpatal	Head, Department of Civil Engg., VNIT Nagpur.	Member
13.	Dr. A.G. Keskar	Head, Dept. of Electronics & Communication Engg. VNIT, Nagpur.	Member
14.	Dr. G.P. Singh	Head, Department of Maths. Engg., VNIT Nagpur.	Member
15.	Dr. A.R.Tembhurkar,	Professor, Dept. of Civil Engg., VNIT Nagpur.	Member
16.	Dr. Rahul Vasant Ralegaonkar	Professor of Civil Engg. VNIT, Nagpur.	Member
17.	Dr. Aniruddha D. Ghare	Professor of Civil Engg., VNIT, Nagpur.	Member
18.	Dr.S.S.Umre,	Professor, Dept. of Chemistry, VNIT, Nagpur.	Member
19.	Dr. O. R. Jaiswal	Professor of Applied Mechanics, VNIT, Nagpur	Member
20.	Dr. Kishor M. Bhurchandi	Professor, Dept.of Electronics and Communication and Associte Dean (Trg & Plt),VNIT, Nagpur	Member
21.	Dr. R.B. Deshmukh	Professor, Centre for VLSI and Nanotechnology, VNIT, Nagpur.	Member





22.	Dr. A. M. Kuthe	Professor of Mechanical Engg., VNIT,	Member
		Nagpur.	
23.	Dr. V. R. Kalamkar	Professor of Mechanical Engg., VNIT,	Member
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24.	Dr. H. M. Suryawanswhi	Professor of Electrical Engg., VNIT,	Member
	D 16 17 171 11	Nagpur. Professor of Electrical Engg., VNIT,	Member
25.	Dr. M.K. Khedkar	Nagpur.	lyleilibei
26.	Dr. Makarand Ballal	Professor of Electrical Engg., VNIT,	Member
20.	DI. Wakafanu Danai	Nagpur.	i i i i i i i i i i i i i i i i i i i
27.	Dr. B.S.Umre	I/C HoD & Professor, Dept. of	Member
		Electrical Engg., VNIT, Nagpur.	
28.	Dr. A.P. Patil	Professor, Dept. of Metallurgical &	Member
		Materials Engg., VNIT, Nagpur	
29.	Dr. V. S. Adane	Professor, Dept. of Architecture &	Member
		Planning, VNIT, Nagpur	
30.	Dr. R.S. Gedam	Professor of Physics Dept., VNIT,	Member
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31.	Dr. B.R. Sankapal	Professor of Physics Dept., VNIT,	Member
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32.	Dr. N.R.Thote	Professor, of Mining Engg. and Assoc.	Member
-		Dean (III and Alumni Activities),	
		VNIT, Nagpur.	
33.	Dr. S.V. Bakre	Assoc. Prof. of Applied Mechs. &	Invited Member
		Associate Dean (Civil Works), VNIT,	
		Nagpur.	
34.	Dr. M.R. Ramteke	Assoc. Prof., Elect. Engg. and	Invited Member
		Associate Dean (Procurement and	
		Stores), VNIT, Nagpur	
35.	Dr. J.G. Suryawanshi	Assoc. Prof. of Mech. and Associate	Invited Member
		Dean (Exams),	
36.	Dr. (Smt.) Rashmi	Assoc. Prof., Mechanical Engg. and	Invited Member
	Uddanwadikar	Associate Dean (Public Relations),	
		VNIT, Nagpur	
37.	Dr.Ratnesh Kumar	Assoc. Prof. of Applied Mechanics &	Invited Member
	,	Assoc. Dean (Hostel Affairs), VNIT,	
		Nagpur	,
38.	Dr. Shailesh R. Sathe	Registrar, VNIT, Nagpur.	Secretary

Shri Nikhil Chingalwar, Dy. Registrar (Acd. & Exam) attended the meeting as special invitee.

Dr. U.A. Deshpande, Professor, Dept. of Computer Sci. & Engg., Dr. K.L. Wasewar, Assoc. Prof. of Chemical Engg., Dr. S.G. Sapate, Professor, Metallurgical & Materials Engg., Dr. Rajendra M. Patrikar, Head, Centre for VLSI and Nanotechnology, Dr. Y. M. Deshpande, Professor, Dept. of Humanities, Dr. Rajashree S. Kotharkar, Professor of Arch. & Planning, Dr. R. R. Yerpude, Dean (FW), Prof. Ashish Darpe, Professor, Mechanical Engg., IIT New Delhi, Prof.(Ms.)Varsha Banerjee, Professor, Physics Dept., IIT New Delhi, University, Nagpur, Prof. Vinayak Deshpande, HOD, Dept. of Business Management, Nagpur University, Nagpur, Dr. V. K. Deshpande, Head, Dept. of Physics, Dr. S. B. Thombre, Head, Department of Mechanical Engg., and Dr. R. B. Keskar, Associate Dean (Information Technology: MIS Network & Website), have submitted leave of absence.

Dr. Sachin Mandavgane, Head, Dept. of Chemical Engg., Dr. P. S. Deshpande, Dept. of Computer Sci. & Engg., Dr. Rajesh Gupta, Prof., Deptt. of Civil Engg., Dr. Vishrut Suresh Landge, Professor



Page 2 of 11 Spoat of Civil Engg., Dr. R. K. Ingle, Prof. Dept. of Applied Mechanics, Dr. K. D. Kulat, Professor of Electronics & Communication, Dr. Animesh N. Chatterjee, Professor of Mechanical Engg., Dr. P. P. Chakarvarthy, Professor of Maths, Dr. M. V. Aware, Professor of Electrical Engg., Dr. V. B. Borghate, HoD, of Electrical Engg., Dr. Dilip R. Peshwe, Prof. of Metallurgical & Materials Engg., Dr. Nita Patne, Assoc. Prof. of Electrical Engg. and Associate Dean (Electrical Works), Dr. A. S. Chaurasia, Assoc. Prof. of Chemical Engg. & Assoc. Dean (Students Activities and Sports), Dr. Shital Chiddarwar, Associate Professor, Mechanical Engg. Deptt. and Associate Dean (International Affairs & Ranking), could not attend the meeting.

The draft Minutes of the 64th Meeting are as follows:

S 64.01: To note and confirm the minutes of the 63rd meeting of the Senate held on 02nd December 2021.

The minutes of the 63rd meeting of the Senate were circulated to all the members. **(Annexure-64-I)** No suggestions were received.

The Senate is requested to confirm the minutes.

Resolution: The minutes of 63rd Senate meeting are confirmed.

S 64.02: To note and confirm the Action Taken Report on resolutions of the 63rd meeting of the Senate.

S63.03: Items for information

- 1. Dr. K. L. Wasewar, Associate Professor, Dept. of Chemical Engg. Has been nominated as faculty representative on the Board of Governors of VNIT.
- 2. The following members have been nominated on APPEC
 - 1. Prof. M. K. Khedkar, Dept. of Electrical Engg.
 - 2. Prof. S. S. Umare, Dept. of Chemistry

they have been nominated because the tenure of Prof. H. M. Suryawanshi and Prof. J. D. Ekhe ended.

Resolution: Ratified.

Action Taken Report: Implemented

S63.04: Items for ratification 54th APPEC decision

- a) A few students of final year UG were found to have registered for excess credits in OC/HM category, in the summer 2021 exam. APPEC has approved these in its 54th meeting as special cases and also suggested measures for early detection and prevention of such cases.
- b) The M. Tech (IPS) students Priya Sinha (MT19IPS016 and R. R. S. Chaitanya (MT19IPS017) were granted semester drop on the basis of their application to carry out internship at industry. Later they claimed that they had not applied for semester drop. There were very detailed deliberations of this case. Finally, APPEC has recommended cancellation of semester drop order and restoration of their registration in its 54th meeting
- c) The APPEC has recommended continuation of registration of the following students for W-2021 session in its 54th meeting. 1) Nanekar Shivam Rajiv (BT18MEC154/22680) 2) Chinmay Sunil Zope (BT17MME024/21579) 3) Anuj Sharma (BT15ECE009/19117) 4)

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Minutes of 64th Senate Meeting held on 31st December, 2021

Totapalli Rahul Pavan (BT17ECE088/21276) and 5) Vipul Ravindra Sukhdeve (BT18EEE111/22874) 6) Masudhahmed Nazeerahmed Tamboli (BT17ECE046/21398) in its 55th meeting.

Resolution: Ratified.

Action Taken Report: Implemented

S63.05: To consider and approve constitution of inter disciplinary Board of studies.

The senate has recently approved an inter-disciplinary M. Tech course "Engineering Applied to Medical Sciences" with the BoS Mechanical Engineering as lead group and supported by BoS of ECE, MME, CSE and Chemical Engg.

In view of NEP 2020, it is anticipated that many inter-disciplinary courses will be floated in the future. Hence, it is necessary to constitute an inter-disciplinary board of studies to cater to this requirement. The detailed proposal is enclosed as **Annexure-63-II** the proposal has already been discussed in 54th APPEC meeting and suggestion made at that time have been incorporated.

Resolution: The Senate approved the constitution of inter disciplinary Board of Studies with the following modifications.

- 39. Normal tenure of all the members at serial no. 3, 4, 5 and 6 will be of 2 years.
- 40. There will be one professor or associate professor and one assistant professor from each group A, B, C and D as members.
- 41. There will be two external members of IDBoS. One will be from industry and one from academia.
- 42. Dean (ACD) and Dean (R&C) will not be ex-officio members of the IDBoS. A separate chairperson of IDBoS will be designated by Chairman Senate.

Action Taken Report: IDBoS will be formed according to the resolution

S63.06: To approve the academic calendar for W21 and S22 sessions of I Year UG (2021 admission) students.

The proposed calendar is in Annexure-63-III. The classes will be in online mode.

Resolution: The Senate approved the academic calendar for W21 and S22 session of I Year UG (2021 admission) students with a suggestion that the mid-sem exam should be conducted for five days for both the semester. Further, Chairman, Senate is authorised to take the decision in this regard.

Action Taken Report: Implemented



63.07: To approve the academic calendar for S22 sessions of higher semester UG and PG students.

The proposed calendar is in Annexure-63-IV. The classes will be in physical mode on campus

Resolution: For all the semesters being conducted in physical mode, the evaluation scheme will be as follows.

Mid-sem exam

: 30% weight

Teacher's assessment : 10 to 20 % weight

End-sem exam

: 50 to 60% weight

The duration of the mid-sem exam will be 1 ½ hours and that of end-sem exam will be 03 hours. This evaluation scheme is for the summer 2022 only. It has been introduced to harmonize the classes and exams of all the semesters being conducted.

All the online mode semesters will have the evaluation pattern as specified in the note from Dean (ACD) Dt. 20/01/2021.

The Senate approved the academic calendar for S22 sessions of higher semester UG and PG students.

Action Taken Report: Implemented

S63.08: To approve Slot wise Time table for simultaneous online and offline classes.

The online classes of first year UG students are proposed to start on 13th December 2021. The higher semester classes starting from 03rd January 2022 will be most likely in physical mode. In order to handle both the types of classes, slot wise time table is proposed as given in Annexure-63-V.

Resolution: The Senate approved the slot wise Time Table for simultaneous online and offline classes.

Action Taken Report: Implemented

S63.09: To consider increasing the number of semester drops that can be availed by **UG/PG** students

According to the section 4.5.g of the Academic Rule Book, "A UG student can withdraw for maximum two semesters during the course of completion of programme. A PG student can withdraw for maximum one semesters during the course of completion of program."

Recently, there were many cases of PG students needing two semester break that were approved by APPEC. In the view of these, the APPEC has proposed that a PG student may be permitted to drop maximum two semesters during the course of completion of program. It is still possible to complete the PG program within the stipulated maximum duration of 3 years for PG program.

On the same lines, even if a UG student is permitted to drop four semesters, it is possible to complete the UG program within the maximum 6 years limit for BTech and 7 year limit for B Arch. Hence, it is proposed that the maximum number of semester drop for UG student be four semesters.

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The senate is requested to approve the proposal.

Resolution: The Senate approved the proposal regarding increasing maximum number of semester drops (withdrawals).

Action Taken Report: Implemented.

S63.10: To consider the amendment in the letter issued to the students about CGPA to marks conversion.

When our students apply for admissions or jobs at other organizations, some of them insist that VNIT should specify the formula for CGPA to marks conversion. VNIT currently issues a letter to the effect that there is no formula for CGPA to marks conversion and any agency who needs this is free to use their own formula. A deadlock situation is created and our students may suffer because of that. We have observed that many other IITs and NITs issue a similar letter. But to avoid such deadlock, they recommend the use of CGPA x 10 notionally for the conversion. Hence, it is recommended to make similar amendment to the letter we issue to the students. The draft of the proposed letter is in **Annexure -63-VI**.

Resolution: The Senate approved the draft of proposed letter and advice to replace in Item No. 5 "if they so wish" by "if it is required".

Action Taken Report: Implemented

S63.11: To approve introduction of new DE courses by the department of ECE.

The BoS of ECE has proposed the following new DE courses.

- 1. For M. Tech. (Communication System Engineering)
 - (i) ECP 514 :: Electromagnetic Interference and Compatibility
 - (ii) ECL 5XX :: Photonic Integrated Circuits and Communication Systems
 - (iii) ECE 5XX :: Photonic Integrated Circuits and Communication Systems
- 2. For B. Tech (Electronics and Communication Engineering)

ECL 4XX:: Machine Learning with Python

The proposal was discussed in 56th APPEC and approved with some minor corrections. The corrected proposal is as given in **Annxure-63-VII**. The senate is requested to approve.

Resolution: The Senate approved the introduction of new DE courses by the department of ECE.

Action Taken Report: Implemented

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S63.12: To consider and approve revised schemes and syllabi of the courses offered by the Department of Civil Engineering.

The BoS Civil Engineering has proposed several changes in the schemes and syllabi of their courses. The summary of changes is given in the table below. Modified schemes and contents are in **Annexure -63-VIII**.

Sr.	B. Tech	Changes Made	Reason
No.			
1	CEP 214 – Hydraulic	Syllabus Modified	
	Engineering		
2	CEL 312 – Transportation	Syllabus modified	
	Engineering		
3	CEL 311 – Pavement Analysis	Syllabus modified	1 1
* **	and Design	Shifted from 7 th to 8 th	
		Semester	
4	CEP 315 – Fluid Mechanics	Syllabus modified	
5	CEL 4XX – Traffic Engineering	New Course added	New Elective course in
			B.Tech 7 th Semester
6	CEL 401 – Irrigation	Syllabus modified	
- 7	Engineering		
7	CEL 4XX – Highway	New Course added	New Elective Course in
	Construction Evaluation and		B.Tech 8 th Semester in
-	Maintenance		place of PG level course
1			CEL-546 pavement
			Evaluation Rehabilitation
=			& Maintenance
8	CEL 423 – Introduction of Soil	Removed from the	More Advanced course
	Dynamics	scheme	for UG level
9	CEL 435 – Remote Sensing and	Syllabus modified	
	Geographical Information		
	System		

Sr.	M. Tech.	Changes Made	Reason
No.			
Constr	uction Technology and Managemen	nt	
1	CEL XXX – Lean Construction	New Course added	New Elective course in 2 nd Semester
Water	Resource Engineering		
1	CEL 419 – River Engineering	The course is removed from the scheme	Replaced by new course CEL 5XX – Fluvial Hydraulics
2	CEL 5XX – Fluvial Hydraulics	In place of CEL 419 – River Engineering the course is added	New Elective course in 2 nd semester
3	CEL 421 – Hydraulic Structures I	Name Changed to	CEL 5XX- Spillway Designs and River Training in 2 nd semester
4	CEL 517 – Hydraulic Structures II	Names changed to	CEL 5XX – Design of Hydraulic Structures Name in 1 st Semester
5	CEP 503 – Water Resources Engineering Lab	Syllabus Modified	
6	CEL 531 – Spatial Analysis for Resources Management	Syllabus modified	

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Transportation Engineering			
1	CEL 536 – Traffic Control & Management	Converted from DE to DC	
2	CEL 543 – Geometric Design of Highways	Converted from DE to DC	
3	CEL 539 – Public Transportation System Planning	Converted from DC to DE	14) - N. [22] A.
4	CEL 535 – Transportation System Analysis CEL 555 – Transportation Network Analysis CEL 590 – Pavement Management Systems CEL 564 – Planning & Designing of Low Volume Roads CEL 567 – Land use and Regional Transport Planning ARL 507 – Planning Principles & Techniques ARL 519 – Metro & Regional Planning ARL 453 – Urban Economics ARL 510 – Infrastructure Planning ARL 516 – Sustainable Development CEL 581 – Design of Underground Structures AML 549 – Finite Element Method	Removed from the Scheme	Redundant and not being offered

The senate is requested to approve.

Resolution: The Senate approved the revised schemes and syllabi of the courses offered by the Department of Civil Engineering

Action Taken Report: Implemented

S63.13: Re-introduction of XX grade in grade card

A proposal was submitted for Re-introduction of XX grade in the student grade card, to indicate semester withdrawal of the students. The proposal was discussed in the 54th APPEC. Modified proposal based on the inputs of APPEC is submitted. (Annexure -63-IX)

Resolution: The Senate approved the re-introduction of XX grade in grade card.

Action Taken Report: Implemented

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S63.14: Approval for conducting 100/300/600 hours duration courses offered by the V. R. Jamdar Siemens Centre of Excellence.

Following courses are proposed:

- 1. Advance Certificate course in Industry 4.0 Duration 600 hours.
- 2. *PG Diploma in Digital Manufacturing Duration 300 hours.*
- 3. Certification in CNC Machining and Programming Duration 100 hours.
- 4. Certification in IoT Duration 100 hours.

Training discipline:

- PLM (CAD,CAM, CAE & Digital Manufacturing), Automation & PLC, IoT
- Smart Factory, CNC, Robotics

The detailed proposal is in **Annexure -63-X**.

Resolution: The centre of excellence may conduct the courses as proposed and can issue certificates as per present practice which is followed for short term training programmes etc. However, institute policy regarding certification for such long duration courses needs to be formulated, by forming a committee. The chairman senate is empowered to constitute a committee for the same.

Action Taken Report: A committee will be formed as per the resolution

Resolution: The action taken report is confirmed.

S64.03: To consider and approve addition of new courses and modification of course contents proposed by BoS (Electrical Engg.)

The BoS of Electrical Engg. have proposed introduction of three new courses

1. Electrical vehicle subsystem modelling, as DE for eight semester

Electrical Engg. and OC for students of other departments.

- 2. Special Electrical Machines- DE for seventh semester ElectricalEngg.
- 3. Introduction to Robotics- DE for seventh semester Electrical Engg,

They have also proposed modifications to contents of several courses.

The APPEC has gone through the proposals in its 57th meeting.

It is not recommended to have the same course as DE for a department and OC for students of other department. The BoS is requested to propose it either as OC for other department students or DE for EEE students.

The BoS is also requested to ensure at least four Course Outcomes in each course. Also, in the course articulation matrix, CO to PO mapping strength be specified numerically in the range 1,2 or 3. No mapping to be denoted by blank box.

The proposal is forwarded to the senate after the corrections. (Annexure-64-II)

Senate is requested to approve.

Resolution: The Senate approved the proposal with the following correction. The new OC course Electrical vehicle subsystem modelling, has to be offered as an open course to the students of all the branches and not a selected few branches as proposed.

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S64.04: To consider the suggestions submitted by Prof. O. R. Jaiswal, Department of Applied Mechanics.

Prof. O. R. Jaiswal has made a suggestion.

a) For M Tech Project-II examination, the external examiner (from NIT/ IIT) will join in online mode, even after the institute resumes normal functioning after the pandemic.

The APPEC recommended it on a pilot basis. With the approval of the Director, M Tech project examination of some of the students may conducted in this manner. The proposal is forwarded to the Senate.

Senate is requested to approve.

Resolution: The Senate approved the proposal with the following modifications.

- 1. M Sc projects to be also evaluated in the similar manner.
- 2. Departments will suggest additional institutes / universities of repute from where the external examiners will be invited.

S64.05: Nomination of External Members on Senate.

As per Senate Item no 45.04, the following external members are nominated on Senate till 31st January 2022.

- 1.Prof.Ashish Darpe, Dept.of Mechanical Engg., IIT, New Delhi.
- 2.Prof.Vinayak Deshpande, Dept. of Business Management, Nagpur University, Nagpur
- 3.Prof.(Mrs.)Varsha Bannerjee, Dept. of Physics, IIT, New Delhi

Consequent to completion of term of non-institutional members, the nominations of externals experts members is to be done. The NIT Act 14(d) stipulates that, "The Senate shall have three persons one of whom shall be woman, not being employee of the Institute, to be nominated by the Chairperson, in consultation with the Director from amongst educationalist of repute, one each from the field of Science, Engineering and Humanities."

Accordingly, it is proposed that Chairman, Senate be empowered to nominate the external members.

The Senate is requested to approve

Resolution: Approved.

S64.06: Any other items with the permission of Chairman.

S64.06.01 Regarding encouraging PG students to publish their research work.

It is observed that contribution of M.Tech students in research publications is not visible and that reflects in NIRF ranking of the institute. Since we have restructured our M.Tech schemes to facilitate one year for project, the students have ample time to do research and they can now produce at least one research paper.

Hence, it is resolved that in Project Phase-II, a student will be eligible for the top grade AA only if there is an accepted or published paper in at least Scopus indexed journal, based on the work done during the project. The student will have to be the first author of such paper. The same criteria will also be applicable to M. Sc. projects. Filing of patent with final specifications will also earn the eligibility for the topmost Mr Sirath grade.

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S64.06.02 Procedure for enhancement in scholarship of PhD students

There is a need to specify a suitable procedure to recommend enhancement in scholarship of PhD students from Rs 31000 pm to Rs 35000 pm. The item was deferred for further deliberations. The changes, if any, will be applicable to July 2022 admissions onward.

The meeting concluded with thanks to the chair.

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Chairman-Senate

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