



المدرسة الوطنية المتعددة التقنيات

Ecole Nationale Polytechnique-ENP



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Ecole Nationale Polytechnique

مخبر التطوير المستدام والميكانيكي

Laboratory of Green and Mechanical Development -LGMD

**The 6th Edition of Mechanical
Engineering Master's Day
Wednesday, May 13, 2026**

**In Room 23, Mechanical
Engineering Department**

Also, please find the link below for
possible virtual participation:

**[https://meet.google.com/ped-viiv-
bwu?authuser=0](https://meet.google.com/ped-viiv-bwu?authuser=0)**

Program

No	Topic title*	Student	Panel of Examiners	Time
1	Biogas Combustion for Transportation: A Review	CHORFI Mohamed Zakaria	Pr. F. Khaldi*, Pr. A. Smaili** Pr. Y. Kerchich**	9h:00-9h:20
2	A Review of Existing Buckling Criteria with Emphasis on Finite Element and Cosserat Rod Models	ABDESSELEM Mohamed Tadj Eddine	Dr. N. Zeroudi*, Dr. N. Ammoura**	9h:20-9h:40
3	Topology Optimization of Aerospace Structures: A Review	HADJ ZOUBIR Bouchra Djaouhara	Dr. N. Amoura*, Dr. D. Saidi**	9h:40-10h:00
4	Modeling of Surface Roughness and Material Removal Rate in Wire Electrical Discharge Machining Using Artificial Intelligence: A Review	MEDJOUBI Abderrahim	Dr. N. Zeroudi*, Dr. D. Saidi**	10h:00-10h:20
5	Design of a Hydrogen Retrofit Kit for Diesel Engines: A Review	TALEB Amira	Dr. S. Djellal*, Pr. F. Khaldi** Pr. A. Smaili**	10h:20-10h:40
6	Performance improvement of patches repaired composites: A Review	CHELLOUCHE Lisa	Dr. Y. Belkacemi *, Dr. N. Amoura**	10h:40-11h:00
7	Aerodynamic Analysis of Domestic Axial Fans: A Review	MELITI Ahmed Fateh	Dr. A. Bouhelal*, Dr. M.N. Hamlaoui** Pr. A. Smaili**	11h:00-11h:20
8	Composite materials and their behavior under tensile loading: A Review	BENCHABA Ahmed Islam	Dr. Zeroudi*, Dr. N. Amoura** Dr. Y. Belkacemi**	11h:20-11h:40
9	Solid-State Hydrogen Storage Systems for Stationary Power Generation: A Review	AZZOUNE Loubna	Pr. F. Khaldi*, Pr. A. Smaili** Dr. A. Bouhelal**	11h:40-12h:00
10	Solid-State Hydrogen Storage Systems for Transportation: A Review	BENAFERI Djazil	Pr. F. Khaldi*, Pr. A. Smaili** Dr. A. Bouhelal**	12h:00-12h:20
11	Fluid–Structure Interaction and Aeroelastic Coupling in Vortex-Induced Vibration Bladeless Wind Turbines: A Review	SIAHMED Mazouz	Dr. N. Amoura*, Dr. A. Bouhelal** Pr. A. Smaili**	12h:20-12h:40
Break				
12	Aerodynamic Performance and Flow-Induced Oscillation Mechanisms in Bladeless Wind Turbines: A Review	BOUMATRAG Kheireddine	Dr. S. Djellal*, Dr. A. Bouhelal** Pr. A. Smaili**	14h:00-14h:20
13	Optimization Methods for Centrifugal Pumps: A Review	Lina SALMI	Dr. A. Bouhelal*, Dr. M.N. Hamlaoui** Pr. A. Smaili**	14h:20-14h:40
14	Cavitation in Centrifugal Pumps: A Review	CHAREF Abd El Ghafour	Dr. A. Bouhelal*, Dr. M.N. Hamlaoui** Pr. A. Smaili**	14h:40-15h:00
15	Reverse Engineering and Design of an Elevator Door Opening and Closing Mechanism : A Review	FERTAS Abderraouf	Dr. N; Zeroudi*, Mr. H. Sedjal**	15h:00-15h:20
16	Plane Bending Fatigue Machine for Composite Materials and its Control and Instrumentation System: A Review	HADJ HAMOU Anis	Dr. N. Zeroudi*, Dr. N. Amoura** Dr. Y. Belkacemi**	15h:20-15h:40
17	Review of Chemical Propulsion Systems with Focus on Monopropellant Systems and Catalytic Decomposition	ZAREB Lydia	Pr. B. Benkoussas*, Mr. H. Bennour**	15h:40-16h:00
18	Manufacturing Process of the Automated Plasma Cutting Machine : A Review	BENNOUNA Mouslem	Dr. N. Amoura*, Dr. Y. Belkacemi** Mr. B. Guergueb**	16h:00-16h:20
19	General Overview of Plasma Cutting: A Review	HANI Ahmed Amine	Dr. N. Amoura*, Dr. Y. Belkacemi** Mr. B. Guergueb**	16h:20-16h:40
20	Energy Study and Optimization of a Hybrid Power Generation System (Diesel – Solar – Battery): A review	BEZAZEL Ikram	Pr. S. Larbi*, Pr. B. Benkoussas**	16h:40-17h:20
21	Review on Intelligent Energy Management Strategies for Hybrid Thermal–Electric Power Systems	BENZAID Nour El Islem	Pr. S. Larbi*, Pr. B. Benkoussas**	17h:00-17h:20
22	Web Application analysis tools for Aerodynamic Performance Predictions of Wind Turbines: A Review	BENAIDA Haithem Abd Allah	Pr. A. Smaili*, Dr. A. Bouhelal**	17h:20-17h:40

* President/Examiner, ** Supervisor