

Mohamed Taha Abdo Sayed

Visiting Professor, LGP2 Laboratory, Université Grenoble Alpes, France.

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Academic Rank:

Assistant Professor, Mechanical and Industrial Engineering Department (ABET-Accredited) at AASTMT.

Fields of Specialization:

Advanced Materials Engineering, Polymer Nanocomposites, Tribology, Sustainable Energy Solutions, and Environmental Technologies, with focus on experimental characterization and artificial intelligence applications in materials design.

Academic Experience:

Rank/Title	Institution	Year
Visiting Professor	LGP2 Laboratory, Université Grenoble Alpes, France.	July 2025
Assistant Professor	Arab Academy for Science, Technology and Maritime Transport (AASTMT), Egypt.	2021 – Now
Postdoctoral Follow	LGP2, Université Grenoble Alpes, France.	2023, 2024
Assistant professor	Faculty of Energy Engineering, Aswan University, Egypt.	2021-2022
Assistant lecturer	Faculty of Energy Engineering, Aswan University	2018 – 2021
Research Assistant	Department of Physics, Chemistry and Pharmacy, 2017 University of Southern, Denmark.	
Teaching Assistant	Faculty of Energy Engineering, Aswan University, Egypt.	2014 – 2017

Education

Degree	Discipline	Institution	Year
PhD	Mechanical Engineering (Mechanical Design)	Faculty of Engineering Minia University. joint program between Université Grenoble Alpes (France) and Minia University (Egypt). Thesis: “Effect of Nanocellulose on the properties of Biocompatible Polymeric composite” supervision: Prof. Alain Dufresne	2019 – 2021
IEP	Sustainable material	Université Grenoble Alpes, Grenoble, France	2019-2020
MS	Production Engineering and Mechanical Design	Faculty of Energy Engineering, Aswan University, Egypt. Thesis: “Highly Dispersion of Carbon Nanotubes (CNTs) within a Polymer Matrix as Advanced Tissue Engineering Scaffold for Biomedical Applications” supervision: Prof. Mohammad Lotfy Hassan	2015– 2018
Diploma	Experimental Methods in Pharmaceutics & biopharmaceutics	University of Southern Denmark, Odense, Denmark.	2017

BS Mechanical Engineering Faculty of Energy Engineering, Aswan University, 2008 – 2013
Egypt

Teaching Experience:

Courses taught at the Mechanical Engineering Department, Collage of Engineering, ASSTMT, Egypt

Code	Course Title	Level	Teaching years
ME758	Tribology	Postgraduate	Fall 2025, 2024, 2023
ME771	Advanced Engineering Materials	Postgraduate	Spring 2024, 2023
ME723	Renewable Energy	Postgraduate	Fall 2025, 2024
EIM1101/ IM112	Manufacturing Technology	Undergraduate 1	Fall 2025, 2024, 2023
EME3506/ ME356	Machine Design I	Undergraduate 3	Fall 2025, 2024, 2023
ME524	Renewable Energy Resource	Undergraduate 5	Fall 2025, 2024, 2023
ME276	Stress analysis	Undergraduate 2	Spring 2024, 2023, 2022
CB431	Technical Installations in Buildings	Undergraduate 4	Spring 2024, 2023, 2022
ME151-EME1501	Engineering Drawing and Projection	Undergraduate 1	Spring 2024, 2023, 2022
ME 542	Maintenance Planning	Undergraduate 5	Spring 2022
ME355	Theory of Machines	Undergraduate 3	Spring 2022
ME534	Energy Management	Undergraduate 4	Spring 2022, 2023
ME455	Computer aided design	Undergraduate 4	Spring 2023
IM212	Manufacturing Process 1	Undergraduate 2	Spring 2022
ME241	Experimental Methods	Undergraduate 2	Spring 2022, 2023
ME274	Material Science	Undergraduate 2	Fall 2024
ME252	Mechanical Engineering Drawing	Undergraduate 2	Fall 2024, 2023
ME357	Machine Design II	Undergraduate 3	Spring 2022, 2023, 2024
NE364	Engineering Economy	Undergraduate 4	Spring 2022
IM535	International Operations Management	Undergraduate 5	Spring 2025
IM434	Operation Research	Undergraduate 4	Fall 2024
ME502	Senior Project I	Undergraduate 5	Fall 2021, 2022, 2023, 2024, 2025
ME503	Senior Project II	Undergraduate 5	Spring 2022, 2023, 2024, 2025

Courses taught at the Mechanical Engineering Department, Faculty of Energy Engineering, Aswan University, Egypt.

MED043	Production Technology Engineering	Undergraduate 1	Fall 2014-2020
UNC121	Industrial Safety	Undergraduate 3	Fall 2015-2018
MED444	Quality Control	Undergraduate 5	Fall 2015-2018
MED125	Physical metallurgy	Undergraduate 3	Fall 2015-2018
MED133	Materials Behavior & Stress Analyses	Undergraduate 2	Fall 2015-2021
	Composite materials	Undergraduate 3	Spring 2015-2020

MED017	Engineering Drawing & Projection I	Undergraduate 1	Fall 2014-2018
MED014	Engineering Drawing & Projection II	Undergraduate 1	Spring 2014-2018
MED116	Mechanical Engineering Drawing.	Undergraduate 2	Fall 2014-2018
MED124	Materials Engineering and properties	Undergraduate 2	Fall 2014-2018
MED235	Machine Design I	Undergraduate 3	Fall 2014-2018
MED236	Machine Design II	Undergraduate 3	Spring 2014-2020
MED321	Engineering Economy	Undergraduate 4	Fall 2014-2018

***Students' Satisfaction Rating: 4.8/5 based on comprehensive feedback from over 200 students per semester through standardized course evaluation surveys.**

Thesis Supervision

Year	Name	Type	University	Thesis Title
2023- till now	Amr Abdelaziem	Ph.D	Production Engineering and Mechanical Design Department, Faculty of Engineering, Minia University	Optimization of Eco-Friendly Gear Oil Formulations with Cellulose Nanocrystal-Based Hybrid Nanoparticles Using Taguchi Approach
2022-till now	Hassan Mubarek	M.Sc.	Mechanical engineering department, Faculty of energy, South Valley university	Design and Manufacturing of Biodegradable Magnesium Ion Battery
2024-till now	Elhussien Hasaan	M.Sc.	Mechanical engineering department, Collage of engineering & technology, AASTMT	Evaluating the Impact of Eco-Friendly Nano-Fillers in Recycled Oils on Fuel Consumption and Energy Loss Reduction in Internal Combustion Engines.
2024- till now	Nour Eldien Haras	M.Sc.	Mechanical engineering department, Collage of engineering & technology, AASTMT	Investigation of Hydrogen-Based Multi-Fuel Blends for Enhancing Performance and Reducing Emissions of Heat Engines
2024- till now	Marcous El kess	M.Sc.	Mechanical engineering department, Collage of engineering& technology, AASTMT	Study Of The Effect Of Inserting The SAVONIUS Horizontal Twisted Blade Into a Tube With a Prominent Internal Spiral Groove
2025- till now	Ahmed Gaber	M.Sc.	Mechanical engineering department, Collage of engineering & technology, AASTMT	Sustainable Solar Still for Producing Fresh Water and Electrcity.

Teaching Interests

In addition to the courses taught, my teaching interests also include:

Machine Design I, II, Materials Science, Engineering Drawing, Renewable Energy, Advanced Engineering Materials, Manufacturing Processes, Stress analysis, Maintenance Planning, Energy Management, and Computer aided design, with focus on both mechanical and industrial engineering applications.

Professional Experience:

Outreach Activities & Community Service

Company/Entity	Title	Description	Year
Technical and Vocational Institute, AASTMT	Consultant	Consultation Service and Topics Preparations training curriculums	2023-2024
The 8th International Competition of the Military Technical College (ICMTC 2024),	Supervisor	Supervised the technical team that achieved third place at the 8th International Competition of the Military Technical College (ICMTC 2024) Drone Challenge (DC 2024), receiving the Lt. General Ibrahim Selim Award	2024
Establishing Nano materials perpetration laboratory funded from AASTMT	Director	Supervising	2022
AASTMT consultation offices		Supervising and consulting to Movenpick Resort Aswan.	2021-2023
The Maritime Research and Consultation center (MRCC)	Technical Committee	Technical Consultant and Supervisor at Egyptian Chemical Industries (KIMA)	2020-2021
Faculty of energy engineering at Aswan university	Technical Committee Member	center of general service and engineering consultant	2014-2018
NUT Egypt for Solar Energy Construction L.L.C	Co-Founder and Business developer	Technical Office	2016 –2020

Presentations & Invited Talks

- “Cellulose Nanomaterials in Tribology: A Green Frontier for Advanced Surface Engineering” as **Keynote speaker at Second International Seminar on Catalysis, Chemical Engineering & Green Chemistry (CaCEG 2025)**, May 21–22, 2025, at the **University of El Oued, Algeria**.
- 3D printing of Nanocellulose for Biomedical Applications, International Scientific Workshop in AASTMT, Aswan, Egypt.
- Carbon Nanotubes: Structure, Properties, and Applications, International Workshop in Applications of Materials Engineering& Nanotechnology: Current and Future prospective. laboratory of Bioengineering and Nanotechnology laboratory (BENT. Lab.) South Valley University Qena Egypt.
- scholarship opportunities and challenges, Collage of Engineering and Technology, AASTMT.

Reviewing and Editorial Experience

- Session Co-Chair in the 8th International Conference on Advanced Technology and Applied Science (ICaTAS 2023).
- Technical Committee Member: 2019The 5th International Conference on Energy Engineering (ICEE-2019).
- Judge Member of Agribusiness Hackathon, IEEE Upper Egypt in Action 2019, Aswan.
- Organizing Member of 4th International Conference on Energy Engineering (ICEE-2017).
- Judge Member of Intel local Science and Engineering Fair, Aswan region (2016, 2017, 2018).
- Reviewed for top international journals in the field, such as:
 1. Case Studies in Thermal Engineering (Elsevier)
 2. Applied Thermal Engineering (Elsevier).

3. Energy for Sustainable Development (Elsevier).
4. International Journal of Polymer Science (Wiley).
5. Chemistry Africa (Springer).
6. Egyptian Journal of Chemistry.
7. International Journal of Applied Energy Systems.
8. SVU-International Journal of Engineering Sciences and Applications.

Funded research projects

- Nov 2024 - July 2025, AutoGuard AI: Revolutionary Bearing Diagnostics for Next-Gen Vehicle Safety. Role: Supervisor as Principal Investigator (PI). Funded by: Academy of Scientific Research and Technology (ASRT), Egypt. Graduation project support Grant amount. $\approx$ 58K EGP.
- Nov 2024 - July 2025, AI-powered Diagnostics for 3D-Printed Mechanical Parts - Role: Supervisor as Principal Investigator (PI). Funded by: Academy of Scientific Research and Technology (ASRT), Egypt. Graduation project support Grant amount. $\approx$ 54K EGP.
- Nov 2024 - July 2025, Smart Home Energy Management System - Role: Supervisor as Principal Investigator (PI). Funded by: Academy of Scientific Research and Technology (ASRT), Egypt. Graduation project support Grant amount. $\approx$ 60K EGP.
- Nov 2023- July 2024, Predictive Automotive fault Defect Detection Using Machine Learning Algorithm - Role: Supervisor. Funded by: Academy of Scientific Research and Technology (ASRT), Egypt. Graduation project support Grant amount. $\approx$ 60K EGP.
- Nov 2022- July 2023, Design of Tribometer for Biomedical Applications - Role: Supervisor. Funded by: Academy of Scientific Research and Technology (ASRT), Egypt. Graduation project support Grant amount. $\approx$ 60K EGP.
- 2021-2023, Development of Cellulose Nanofibers Filaments and 3D Scaffold for Bone Tissue Engineering Application. Project ID: Role: PI Collaborators: South Valley University, Egypt and Louisiana State University, USA. Funded by: AASTMT Collaborative Research Project (CRP), Egypt. Project fund: 500K EGP.
- Sep 2020 - Feb 2023 Innovative Photovoltaics Envelopes for adaptive energy and comfort management of Harsh Climate Areas in Upper Egypt toward nearly zero energy buildings (PVENVOLPNZEB). Role: Senior researcher. Funded by The Arab Academy for Science, Technology & Maritime Transport, Egypt. Project fund: 500K EGP.
- Mar 2020 – Mar 2021, Novel biomass-based materials for high-efficiency wastewater treatment -. Role: Co-Principal Investigator (Co-PI) Collaborators: Tresice Ingeniería Y Control company, Spain, Polytechnic University of Madrid, Madrid, Spain, and Egypt-Japan University of Science and Technology, PURICHEM company, Egypt. Funded by: Aswan University Sustainable Development Fund, Egypt. Project fund: 50K EGP.
- Aug 2019 - Aug 2021, E+ Capacity building in the field of Higher Education project Innovative Lifelong e-Learning for Professional Engineers (e-ProfEng)- Project ID: 33515. Role: Co-Principal Investigator (Co-PI) Collaborators: Ain Shams University; ASWAN University; Arab Academy for Science, Technology and Maritime Transport; Nile University (NU); National Technical University of Athens; E-learning Competence Center, Ministry of Communication, Egypt; Egyptian Engineering Syndicate; Josip Juraj Strossmayer University of Osijek (FERIT); University of Oviedo; City Laboratory Graz Innovations for urban quality of life (SLG). Funded by: Erasmus+.

Professional Credentials, Certifications & Licensing:

- American Society of Mechanical Engineers (ASME) ID Number 000103720531. Since 2021
- Egyptian Syndicate of Engineering, Since 2013

Professional Development Activities:

- Training on: “Change Management and Organizational Development” Arab Academy for Science, Technology & Maritime Transport, Egypt, 2025.
- Training on: “using AI in education” Arab Academy for Science, Technology & Maritime Transport, Egypt, 2024.

- Training on: “International Publication” Arab Academy for Science, Technology & Maritime Transport, Egypt, 2023.
- Training on: “Credit Hours and Academic Guidance System” Arab Academy for Science, Technology & Maritime Transport, Egypt, 2023.
- Training on: “Accreditation Board for Engineering and Technology (ABET)” Arab Academy for Science, Technology & Maritime Transport, Egypt, 2021.
- Training on: “National Accreditation and Quality Assurance Authority (NAQAA) ” Arab Academy for Science, Technology & Maritime Transport, Egypt, 2020.
- Training on: “ISO 9001:2015” Arab Academy for Science, Technology & Maritime Transport, Egypt, 2021.
- Certification Digital Transformation 6 modules, Minia University, Egypt, 2021.
- Certification Attendance 1st NRC-Grenoble INP International Conference on Science and Sustainable Development under the theme of “There can never be sustainable development without science” from 16 to 18 Sep 2019. National Research Centre, Egypt, 2019.
- Training modules on “Advanced Laboratory Safety, research ethics, Biosafety Level 1 Training, Safety for Office & General Work Areas, Research Lab, Shop and Chemical Safety, TEES Hazardous Waste Disposal, and TEES Shop & Tool Safety Course. Grenoble Alpes University, France, 2019, 2023.
- Certification attending course Participated in the module entitled Research Management within the DAAD Kairo Akademie October 2017.
- Certification attending course in the module entitled International Networking within the DAAD Kairo Akademie. DAAD Kairo Akademie, Egypt, 2017.
- Certification attending Strategic Planning Course in the capabilities of academic staff Development Centre Aswan University, Egypt, 2015.
- Certification attending Scientific Ethics Course in the capabilities of academic staff Development Centre, Aswan University, Egypt, 2015.
- Certification attending course ANSYS (basic user) in Mechanical simulation. Cairo, Egypt, 2015.
- Certification attending course Diesel engine technology and overhauling. Cairo, Egypt, 2013.
- Certification attending course Solid work program “in the jelecom-Egypt company. Cairo, Egypt, 2012.
- Certification attending course Programming and operation of CNC machine in industrial training council. Cairo, Egypt, 2012.
- Certification attending course AutoCAD program in the faculty of energy engineering. Aswan University, Egypt, 2011.
- Electro-Hydraulic. At Hydro Plants Generation Company Training Center. Aswan, Egypt, 2011.
- Development of Thinking and Managerial Skills Unit, GPA: 4.35 (out of 5), in Knowledge Approach. Aswan, Egypt, 2010.
- Summer training in Egyptian Sugar and Integrated Industries Company. Aswan, Egypt, 2009.

Service Activities:

- Member of the College of Engineering Council, participating in monthly meetings since July 2024.
- Head of Technical and Financial Committee for Mechatronics Laboratory Procurement, College of Engineering and Technology, AAST, Aswan, Egypt (July 2024).
- Participated in developing a change B.Sc. program Courses at Mechanical Engineering from 162 Cr.hr to 144 Cr.hr, Collage of Engineering and Technology, AASTMT, Aswan, Egypt (2023).
- Head and Advisor, The American Society of Mechanical Engineers (ASME) Student Chapter, Collage of Engineering and Technology, AASTMT, Aswan, Egypt (2022 till now).
- Head Marketing Committee, Collage of Engineering and Technology, AASTMT, Aswan, Egypt (Dec 2022 till now).
- Member of Quality assurance unit (ISO, ABET), Collage of Engineering and Technology, AASTMT, Aswan, Egypt (2022 till now).
- Member of the Technical and Financial Committee for Engineering Workshop Procurement, College of Engineering and Technology, AAST, Aswan, Egypt (2021).
- Member of Quality assurance unit (NAQAA), Aswan University, Aswan, Egypt (2014-2021).
- Member of the Technical and Financial Committee for Heat Transfer, Thermodynamics, and Refrigeration and Air Conditioning Laboratory Procurement, College of Engineering and Technology, AAST, Aswan, Egypt (2020-2021).
- Director and lab head of Materials preparation laboratory, Collage of Engineering and Technology, AASTMT, Aswan, Egypt (2022 till now).
- Courses coordinator, Industrial section in the department, Collage of Engineering and Technology, AASTMT, Aswan, Egypt (Sep 2022 till now).
- Director of The Engineering Workshop, Collage of Engineering and Technology, Arab Academy for Science, Technology & Maritime Transport, Aswan, Egypt (March 2022 till now).
- Member of the Engineering Consulting Office at the AASTMT level to engage with government entities and the private sector at Aswan Government.
- Participated in developing a new M.Sc. program and Diploma Courses at Production Engineering and Mechanical Design according to the National Academic Standards (NARS). Faculty of Energy Engineering, Aswan University (2020).

Publications and Presentations (In the last 5 Years):

International Refereed Journals

1. Fedia Bettaieb, Ahmed Nabhan, M. Shehadeh, Ahmed Fouly, Ibrahim Saad ELDeeb, **Mohamed Taha** "Sustainable Bio-Nanocomposite from Lignocellulose Nanofibers and HDPE for Knee Biomechanics: A Study of Tribological and Mechanical Properties" Open Engineering, Accepted 18/06/2025.
2. Ahmed Nabhan, Hamouda M. Mousa, Husain Alfadhel, Mohamed R. El-Sharkawy, Hossa F. Al-Shareef, Fatimah A. M. Al-Zahrani, **Mohamed Taha** "Comparative Performance Analysis of Gear Oil Enhanced with Biomass-Derived Cellulose Nanocrystals and Al₂O₃ Nanoparticles" International Journal of Polymer Science Volume 2025, Issue 1. <https://onlinelibrary.wiley.com/doi/10.1155/ijps/8850107>
3. **Mohamed Taha**, Ragab Abouzeid, A. H. Abdelbaky Elbatran, M. Shehadeh, Husain Alfadhel, Wafa Mazi, Noha Omer, Mahmoud A. Abdelaziz, Amal T. Mogharbel, Hamouda M. Mousa "3D-Printed Filaments: Alginate Hydrogels With Cellulose Nanofibers as Functional Biomaterials for Tissue Engineering Applications" International Journal of Polymer Science Volume 2024, Issue 1. <https://doi.org/10.1155/ijps/8314580>

4. **Mohamed Taha**, Hamouda M. Mousa, Husain Alfadhel, Emad Abouel Nasr, A.H. Abdelbaky Elbatran , Ahmed Nabhan, Mohamed R. El-Sharkawy “Utilizing cellulose nanofibers to enhance spent engine oil performance: A sustainable environmental solution” Results in Engineering, Volume 23, September 2024, 102395. <https://doi.org/10.1016/j.rineng.2024.102395>
5. Ahmed Fouly, **Mohamed Taha**, Thamer Albahkali, Muhammad Ali Shar, Hany S Abdo, Ahmed Nabhan “Developing Artificial Intelligence Models for Predicting the Tribo-Mechanical Properties of HDPE Nanocomposite Used in Artificial Hip Joints” IEEE Access (Volume: 12) 2024. [10.1109/ACCESS.2024.3352448](https://doi.org/10.1109/ACCESS.2024.3352448)
6. Ahmed Nabhan, Ahmed Fouly, Thamer Albahkali, Muhammad Ali Shar, Hany S Abdo and **Mohamed Taha** “Casting light on the tribological properties of paraffin-based HDPE enriched with graphene nano-additives: an experimental investigation” Materials Research Express, Volume 10, Number 12. [10.1088/2053-1591/ad13cd](https://doi.org/10.1088/2053-1591/ad13cd)
7. Hamouda M Mousa ,Mostafa M. Sayed ,Ibrahim M. A. Mohamed ,M. S. Abd El-sadek ,Emad Abouel Nasr ,Mohamed A. Mohamed and **Mohamed Taha** “Engineering of Multifunctional Nanocomposite Membranes for Wastewater Treatment: Oil/Water Separation and Dye Degradation” Membranes 2023, 13(10), 810; <https://doi.org/10.3390/membranes13100810>
8. **Mohamed Taha**, “Tribological and mechanical Performance of HDPE/SWCNT Nanocomposites as Bearing Material” KGK 4/2023
9. Nabhan A., **Mohamed Taha**, Ahmed Mohamed Mahmoud Ibrahim & Ameer A. K. “Role of hybrid nanofiller GNPs/Al₂O₃ on enhancing the mechanical and tribological performance of HDPE composite” Scientific Reports volume 13, Article number: 12447 (2023). <https://www.nature.com/articles/s41598-023-39172-9>
10. **Mohamed Taha**; Ahmed Fouly; Hany S. Abdo; Ibrahim Abdullah Alnaser; Ragab Abouzeid; Ahmed Nabhan “Unveiling the Potential of Rice Straw Nano Fiber-Reinforced HDPE for Biomedical Applications: Investigating Mechanical and Tribological Characteristics” J.Funct.Biomater. 2023, 14(7), 366; <https://doi.org/10.3390/jfb14070366>
11. Ragab Abouzeid, **Mohamed Taha**, Ramzi Khiari & Qinglin Wu, “TEMPO-oxidized Cellulose Nanofibers/ Alginate Nanocomposite as a Promising nanocomposite Material for the Adsorption of Cationic Dyes” Chemistry Africa (2023), Springer, 05 April 2023. <https://link.springer.com/article/10.1007/s42250-023-00661-z>
12. Ahmed Nabhan, Galal Sherif, Ragab Abouzeid, and **Mohamed Taha**, “Mechanical and Tribological Performance of HDPE Matrix Reinforced by Hybrid Gr/TiO₂ NPs for Hip Joint Replacement” J. Funct. Biomater. 2023, 14(3), 140 <https://onlinelibrary.wiley.com/doi/full/10.1002/admi.202200557>
13. Mohamed Qenawy; **Mohamed Taha**; Junfeng Wang; A.H. Abdelbaky Elbatran, “Effects of hole-inlet velocity on the adiabatic film cooling effectiveness behind crossflow-fed shaped holes” Applied Thermal Engineering Volume 222, 5 March 2023, 119927. <https://www.sciencedirect.com/science/article/pii/S0927775722014108>
14. A. Nabhan; **Mohamed Taha**; Nouby m, “Filler loading effect of Al₂O₃/TiO₂ nanoparticles on physical and mechanical characteristics of dental base composite (PMMA)” , Polymer Testing, Volume 117, January 2023, 107848. <https://onlinelibrary.wiley.com/doi/full/10.1002/app.52757>
15. Nabhan A., A. M. A. Mahmoud, **Mohamed Taha**, “Investigation of Partial Replacement of Na₂O on Structural Features and Thermal Properties of Sodium Phosphate Glass System”, Egypt. J.Chem. Vol.65, No. 11 pp. 741 – 747 (2022). <https://doi.org/10.1016/j.matlet.2021.130965>

16. Nabhan A.; ahmed rashed; **Mohamed Taha**; Ragab, E. Abou-Zeid; Ahmed Barhoum, "Tribological Performance for Steel–Steel Contact Interfaces Using Hybrid MWCNTs/Al₂O₃ Nanoparticles as Oil-Based Additives in Engines" "Fluids 2022, 7(12), 364 . <https://doi.org/10.3390/fluids7120364>
17. Nahla El-Wakil, **Mohamed Taha**, Ragab Abouzeid & Alain dufresne, "Dissolution and regeneration of cellulose from N-methylmorpholine N-oxide and fabrication of nanofibrillated cellulose" , Biomass Conv. Bioref. (2022); <https://doi.org/10.3390/mi12111327>
18. Mohamed Qenawy, **Mohamed Taha** , A.H. Abdelbaky Elbatran, "Unsteady adiabatic film cooling effectiveness behind shaped holes" Case Studies in Thermal Engineering, Volume 34, June 2022, 102005. <https://doi.org/10.1016/j.jallcom.2021.161169>
19. Mahmoud Gallab, **Mohamed Taha**, Ahmed Rashed, Ahmed Nabhan, "Effect of Low Content of Al₂O₃ Nanoparticles on the Mechanical and Tribological Properties of Polymethyl Methacrylate as a Denture Base Material "Egypt. J. Chem. Vol. 65, No. 8, pp. 1 - 9 (2022) <https://doi.org/10.21608/ejchem.2022.88597.4786>
20. **Mohamed Taha**, Mohammad L. Hassand , Montasser Dewidaree , M.A. kamel , W. Y. Ali , Alain Dufresne, "Evaluation of eco-friendly cellulose and lignocellulose nanofibers from rice straw using multiple quality index " , Egypt. J. Chem. Vol. 64, No. 8 pp. 4707 - 4717 (2021). [10.21608/EJCHEM.2021.77618.3800](https://doi.org/10.21608/EJCHEM.2021.77618.3800)
21. **Mohamed Taha**, Mohammad L. Hassand , Montasser Dewidaree , M.A. kamel , W. Y. Ali , Alain Dufresne "TRIBOLOGICAL BEHAVIOR OF ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE NANOCOMPOSITES" JOURNAL OF THE EGYPTIAN SOCIETY OF TRIBOLOGY VOLUME 18, No. 2, April 2021, pp. 27 - 41 ISSN 2090 – 5882. <https://doi.org/10.21608/jest.2021.169065>
22. Abdalla Abdal-hay, **Mohamed Taha**, Hamouda M. Mousa, Michal Bartnikowski, Mohammad L. Hassan, Martin M Brandel, Montasser Dewidar, Saso Ivanovski "Engineering of PCL/MWCNTs Electrical Composite Nanofibers for Tissue Engineering Applications", "Ceramic International journal" .<https://www.sciencedirect.com/science/article/pii/S0272884219310314>

Conference Papers

1. **Mohamed Taha**, as Keynote speaker "Cellulose Nanomaterials in Tribology: A Green Frontier for Advanced Surface Engineering" Second International Seminar on Catalysis, Chemical Engineering & Green Chemistry (CaCEG 2025), May 21–22, 2025, at the University of El Oued, Algeria.
2. **Mohamed Taha**, 1st NRC-Grenoble INP International Conference on Science and Sustainable Development under the theme of "There can never be sustainable development without science". National Research Centre, Egypt.
3. **Mohamed Taha**, Mohammad L. Hassan, Montasser Dewidaree, M.A. kamel, W. Y. Ali, Alain Dufresne. Eco friendly Nanofibrous from Bleaching and unbleaching Egyptian Rice Straw. Nanocellulose Winter school, December 11th to 13th 2019, Col du Lautaret, France.
4. **Mohamed Taha**, "International Workshop in Applications of Materials Engineering& Nanotechnology: Current and Future prospective". south valley university.Qena.Egypt
5. **Mohamed Taha**, Abdalla Abdal-hay, Mohammad L.Hassan and Montasser Dewidar, "Fabrication and investigate properties of nanocomposite fibrous scaffold multi-wall carbon nanotube / Poly(ε-caprolactone) using simple method air jet spinning",4th International Conference on Advanced Sciences (ICAS4), Hurghada, Egypt. November 7-10,2017.

Books/Book Chapters

1. Fedia Bettaieb, Nouredine Baaka, **Mohamed Taha**, Chapter 6 - Preparation and Characterization of Cellulosic Derivatives, Editor(s): Ramzi Khiari, Mohammad Jawaidd, Current Status and Opportunity in Fibre and Composites, Springer, 2025, Pages 105-120, ISBN 978-981-96-4546-6, https://link.springer.com/chapter/10.1007/978-981-96-4546-6_6
2. Fedia Bettaieb, Nouredine Baaka, **Mohamed Taha**, Chapter 2 - Chemical composition and pulping of fibre from Posidonia oceanica, Editor(s): Ramzi Khiari, Mohammad Jawaidd, Current Status and Opportunity in Fibre and

Academic Awards and Scholarships

2025	Distinguished Visiting Professor Grant, UGA-Grenoble INP Institute of Engineering and Management, France, 2025. Competitive selection for international faculty exchange program fostering research collaboration and academic excellence (Duration: 2 months)	UGA-Grenoble INP Institute of Engineering and Management, France.
2024	Principal candidate Scholarship Training from Embassy of France in Egypt- French Institute in Egypt (IFE). Visiting Researcher (1month)	University of Grenoble Alpes, France.
2023	Principal candidate Scholarship Training from Embassy of France in Egypt- French Institute in Egypt (IFE). Visiting Researcher (1.5 month)	University of Grenoble Alpes, France.
2023	Principal candidate for the 2023 call for proposal of the LabEx Tec21 scholar program – post-doctoral research grants (2 months)	University of Grenoble Alpes, France.
2023	Principal candidate for the 2023 the Erasmus+ International Credit Mobility Programme Staff Mobility for Teaching & Training.	The University of Chemical Technology and Metallurgy, Bulgaria.
2021 to 2024	International Scientific Publishing Award.	Arab Academy for Science, Technology & Maritime Transport Aswan, Egypt.
2022	Principal candidate for the 2022 the Erasmus+ International Credit Mobility Programme Staff Mobility for training.	Aristotle University of Thessaloniki, Greece.
2021	Certificate of Merit for Outstanding Student. Award from Egyptian Engineers Syndicate for Ph.D.	Egyptian Engineers Syndicate, Egypt.
2020	Full Scholarship from the French government's "Eiffel Excellence scholarship" programme. Study the doctoral (I Canceled due to Covid-19).	University of Grenoble Alpes, France.
2019	Full Scholarship from the French Government. collect scientific data Ph.D's degree.	University of Grenoble Alpes, France.
2019	Excellent Scientific Research for the year 2019, 2021.	Aswan university, Egypt
2019	Certificate of Merit for Outstanding Student. Award from Egyptian Engineers Syndicate for MSc.	Egyptian Engineers Syndicate, Egypt.
2016	Danish Government Scholarship under the Cultural Agreements. Full scholarship for collecting scientific data master's degree.	Southern university of Denmark, Denmark.

References

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