

CURRICULUM VITAE



Yazan Taamneh, Ph.D.

**Professor
of Mechanical Engineering**

**Aeronautical Engineering Department
(ABET Accredited Program)
Faculty of Engineering**

Jordan University of Science and Technology,
P.O. Box 3030,
Irbid 22110, Jordan

PERSONNEL INFORMATION

Full Name:	Yazan M. Taamneh
Complete Postal Address:	Yazan Taamneh, Ph.D. Professor of Mechanical Engineering Aeronautical Engineering Department Faculty of Engineering Jordan University of Science and Technology, P.O. Box 3030, Irbid 22110, Jordan
Date of Birth:	28/04/1977
Nationality	Jordanian
Telephone Number (Mobile):	00962775622065
Email address:	ymtaamneh@just.edu.jo or taamneh@daad-alumni.de
Researchgate	https://www.researchgate.net/profile/Yazan_Taamneh
Google Scholar	https://scholar.google.com/citations?user=_Tq_MXQAAAAJ&hl=en

EDUCATION

Degree	Major	Year	University/College
Doctorate	Ph.D. in Mechanical and Process Engineering Dissertation: Experimental and Numerical Investigation of Dynamic Filter	2009	Technical University of Kaiserslautern, Mechanical and Process Engineering, Kaiserslautern, Germany
Master	Master of Science in Mechanical Engineering Dissertation: Hydrodynamic and Thermal Behavior of Gas Flow in Microchannel Filled with Porous Media	2004	Jordan University of Science and Technology, Mechanical Engineering Department, Irbid, Jordan.
Bachelor	Bachelor of Science in Mechanical Engineering Project: Design of Solar Pond	2001	Jordan University of Science and Technology, Mechanical Engineering Department, Irbid 21110 Jordan.

AWARDS AND HONORS

No.	Honors and Awards
1	Visiting Researcher, TU Kaiserslautern, Mechanical Process Engineering (MVT) Awarded by German Research Foundation (DFG), June-September 2013
2	Visiting Researcher; TU Kaiserslautern, Mechanical Process Engineering (MVT), Awarded by German Academic Exchange Service (DAAD), June-September 2012
3	Visiting Researcher, TU Kaiserslautern, Mechanical Process Engineering (MVT) Awarded by German Research Foundation (DFG), June-September 2010.
4	Honor Student Award for Outstanding Performance, Department of Mechanical Engineering, Jordan University of Science and Technology, First Semester 2000-2001.

SCHOLARSHIPS

Scholarships
<ul style="list-style-type: none"> • Ph.D. Scholarship awarded by German Academic Exchange Service (DAAD), Germany 4/2006 to 4/2009. • Ph.D. Scholarship awarded by Tafila Technical University; Jordan 10/2007 to 4/2009.

ACADEMIC EXPERIENCE

EXPERIENCE	IN	NO. OF YEARS
Chairman of Aeronautical Engineering, 9/2018 - now	Jordan University of Science and Technology, Aeronautical Engineering Department College of Engineering	More than 3 years
Professor, 10/2020	Jordan University of Science and Technology, Aeronautical Engineering Department College of Engineering	
Associate Professor, 9/2015 – 10/2020	Jordan University of Science and Technology, Aeronautical Engineering Department College of Engineering	5
Associate Professor, 9/2014 to 9/2015	Tafila Technical University, College of Engineering, Mechanical Engineering Department, Jordan	1
Assitant of Engineering Dean 9/2014 to 9/2015	Tafila Technical University, College of Engineering, Mechanical Engineering Department., Jordan	1
Assistant Professor, 9/2010 to 9/2014	Tafila Technical University, College of Engineering, Mechanical Engineering Department, Jordan.	4
Lecturer, 5/2009 to 9/2010	Tafila Technical University, College of Engineering, Mechanical Engineering Department, Jordan	1.25
Teaching Assistant (Wissenschaftlicher Mitarbeiter), 10/2004 to 4/2009.	Technical University of Kaiserslautern, Mechanical and Process Engineering, MVT, Germany	4.5
Teaching Assistant, 9/2002 to 6/2004	Jordan University of Science and Technology, Mechanical Engineering Department, Jordan	2

WORK EXPERIENCE

Experience	In	No. of Years
Engineer-Trainee 10/2003 to 9 /2004	Ministry of Public Works and Housing, Irbid, Jordan	1
Engineer-Trainee 7/2002 to 9/2002	Ford Motor Company, GmbH, Niehl, Cologne, Germany	0.25

RESEARCH INTERESTS

- Wastewater treatment
- Fluid flow in micro channel
- Solid liquid separation
- Dynamic micro filtration
- Particle classification
- Micro and Nano particle measurements using laser diffraction
- Nanofluid
- Flow in porous material
- Boundary layer theory
- Heat and mass transfer
- Computational fluid dynamics CFD using ANSYS and COMSOL Multiphysics software.

TEACHING EXPERIENCE

- Introduction to Aeronautical Engineering
- Advanced applied Mathematics
- Aeronautics lab 1
- Aircraft performance
- Computational fluid dynamics
- Theory of machine
- Heat transfer
- Fluid mechanics
- Thermodynamics I& II
- Energy Conversion
- Power Stations
- Instrumentations
- Gas Dynamics
- Mechanical vibration
- Engineering mechanics: Dynamics
- Engineering mechanics: Statics
- Hydraulic machine
- Hydraulic and pneumatics machines
- Professional ethics for Engineers

- Solid Modeling
- Engineering training

WORKSHOPS AND TRAINING-ATTENDED

No.	Title	Period
1	ANSYS Training Course, Regional University Computing Center, RHRK-TU Kaiserslautern, Germany	September 2006
	DAAD Scholarship holders meeting in Giessen from 15 to 17 June 2007, Germany	June 2007
2	Particle Systems Characterization, Short course, 10 th World Filtration Congress, 14-18, 2008 Leipzig, Germany	April 2008
3	Cross-Flow-Micro-and Ultra-Filtration, Short course, 10 th World Filtration Congress, 14-18, 2008 Leipzig, Germany	April 2008
4	Teaching Methods and Learning Styles, Academic Development and Quality Assurance Center, Jordan University of Science and Technology.	February 2017.
5	Statistical Data Using Minitab, Academic Development and Quality Assurance Center, Jordan University of Science and Technology.	January 2017
6	Scientific Day of the Faculty of Engineering and Alumni Day, Faculty of Engineering, Jordan University of Science and Technology	December 2019
7	The Ninth Jordanian International Mechanical Engineering Conference 16-18 October 2018, Amman Jordan	October 2018
8	Attending an intensive German language course to prepare for the university entrance examination DSH (Holding DSH Certificate from TU Kaiserslautern, Germany)	October 2001 to June 2002

RESEARCH FUNDED PROJECTS

No.	Project Title	Year	Granted by
1	Simultaneous dispersion and classification of suspensions with nanoscale particles using a dynamic filter	2008	AiF-Projekt GmbH 14833 N, 18.09.2008, Berlin Germany
2	Classification of suspensions by means of rotating filter discs and autodynamics high frequency backwashing	2009	AiF-Vorhaben-Nr.GAG: 14833 N / 1, Berlin Germany
3	Heat transfer and fluid flow through spacer filled channel in membrane module	2012	German Academic Exchange Service, DAAD A/12/05703 Bonn Germany

4	Experiment and prediction of adsorption breakthrough curves of Jordanian natural Zeolite for heavy metals removal	2013	German Research Foundation, DFG R1 776/31-1 Bonn Germany
---	---	------	--

SUPERVISED GRADUATE STUDENTS (M.Sc. and Dip. -Ing.)

No.	Thesis Title
1	Combined convection heat transfer in a square lid driven cavity filled with nanofluids submitted by Audai Nawafleh, 07/2019
2	Experimental study on pyramid solar still utilizing different types of nano-particles submitted by Malik Al-Abed Allah, 04/2019
3	Dynamic simulation for the energy conservation measures in the Jordanian residential building submitted by Ayham Alrabee, 01/2018
4	Untersuchung von klassieren mit Dynamischen Filter, Studienarbeit submitted by Chen Yueshuo from Technical University of Kaiserslautern, Germany 6/2008
5	Untersuchung zur Siebfiltration mit Dynamischen Filter, Diplomarbeit submitted by Jinbo Bie to obtain Dip. -Ing. grade from Technical University of Kaiserslautern-Germany 6/2006.

THESES DEFENSE COMMITTEE MEMBER (SELECTED)

No.	Thesis Title
1	Analytical study of gaseous slip flow and heat transfer in horizontal rectangular microchannel with second order boundary condition effected by inclined magnetic field. A.Al Wardat, Jordan University of Science and Technology, Jordan 6/2019
2	Self-Powered Solar Ejector Cooling System Supplied by Thermoelectric Generators, Alabas Hasan Jordan University of Science and Technology, Jordan 7/2019
3	Jet vortex technology to enhance the heat transfer within a heat exchange. M. Al Mashadan, Hashemite University, Zarqa, Jordan 10/2018
4	Extracting Electric Power from Gas Turbine Using Thermoelectric Generators Enhanced by Evaporative Cooling. A Qawasmi, Jordan University of Science and Technology, Jordan 6/2017

5	Experimental studies of Pithecellobium Dulce Seed Oil Methyl Ester on a DI Diesel Engine, submitted by Chandra Sekhars, Anna University Chennai, India, Ph.D. Thesis 7/2018
6	Design of a Standalone Hybrid Solar Wind Water Distiller. S.Talafha, Jordan University of Science and Technology, Jordan 6/2015
7	Intelligent maximum power point tracking system for photovoltaic generators using Adaptive Neuro-Fuzzy Inference System ANFIS. Naser F. Eid, Jordan University of Science and Technology, Jordan 12/2014

PUBLICATIONS (REFEREED JOURNALS)

No.	Title
1	Taamneh, Y. , Numerical Simulation of Heat and Mass Transfer in Direct Contact Membrane Distillation Module, (2022). under review.
2	Taamneh, Y. , Non-Darcian effects on natural convection in a porous square cavity heated periodically on both sidewalls. (2020). under review.
3	Taamneh, Y. , Al-Abed Allah, M., Experimental study on pyramid solar still utilizing different types of nano-particle (2020), Desalination and Water Treatment , 198 (2020) pp. 31-40.
4	Muthu Manokar, A., Taamneh, Y. , Kabeel, A.E., Prince Winston, D., Vijayabalan, P., Balaji, D., Sathyamurthy, R., Padmanaba Sundar, S., Mageshbabu, D., Effect of water depth and insulation on the productivity of an acrylic pyramid solar still-An experimental study (2020) Groundwater for Sustainable Development , 10 (2020), art. no. 100319
5	Panchal, H., Taamneh, Y. , Sathyamurthy, R., Kabeel, A.E., El-Agouz, S.A., Naveen Kumar, P., Manokar, A.M., Arunkumar, T., Mageshbabu, D., Bharathwaaj, R., Economic and exergy investigation of triangular pyramid solar still integrated to inclined solar still with baffles (2019) International Journal of Ambient Energy , 40 (6), pp. 571-576.
6	Taamneh, Y. , Kabeel, A.E., Prakash, N., Sathyamurthy, R., Chamkha, A.J., "Thermal and hydraulic characteristics of a triangular duct using an Al ₂ O ₃ nanofluid in a turbulent flow Regime" (2019) Heat Transfer-Asian Research , 48 (6), pp. 2639-2654.
7	Kabeel, A.E., Taamneh, Y. , Sathyamurthy, R., Naveen Kumar, P., Manokar, A.M., Arunkumar, T. Experimental study on conventional solar still integrated with inclined solar still under different water depth (2019) Heat Transfer - Asian Research , 48 (1), pp. 100-114.

8	Manokar, A.M., Taamneh, Y. , Kabeel, A.E., Sathyamurthy, R., Winston, D.P., Chamkha, A.J. Review of different methods employed in pyramidal solar still desalination to augment the yield of freshwater (2018) Desalination and Water Treatment , 136, pp. 20-30.
9	Taamneh, Y. , Alrbai, M., Sathyamurthy, R. Thermal optimization of tapered pin fin exposed to nonuniform surface heat transfer coefficient (2018) Heat Transfer-Asian Research , 47 (7), pp. 857-868.
10	Alrbai, M., Qawasmeh, B.R., Al-Hamamre, Z., Sari, M.S., Taamneh, Y. Impact of Exhaust Gas Recirculation on Performance and Emissions of Free-Piston Electrical Generator Fueled by DME (2018) Journal of Energy Engineering , 144 (3), art. no. 040180271
11	Taamneh, Y. , Muthumanokar, A., Kabeel, A.E., El-Agouz, S.A., Sathyamurthy, R., Prakash, Chandran, P. Experimental analysis of inclined solar water heater with baffles (2018) Chemical Engineering Transactions , 71, pp. 1339-1344.
12	Abdelal, N., Taamneh, Y. Enhancement of pyramid solar still productivity using absorber plates made of carbon fiber/CNT-modified epoxy composites (2017) Desalination , 419, pp. 117-124.
13	Taamneh, Y. Thermal analysis of gas turbine disk integrated with rotating heat pipes (2017) Case Studies in Thermal Engineering , 10, pp. 335-342.
14	Bataineh, K., Taamneh, Y. Adaptive neuro-fuzzy inference system-based improvement of perturb and observe maximum power point tracking method for photovoltaic systems (2017) International Journal of Power Electronics and Drive Systems , 8 (3), pp. 1327-1334.
15	Taamneh, Y. Heat and fluid flow through a spacer-filled channel in a membrane module (2017) Heat Transfer Research , 48 (17), pp. 1567-1580.
16	Bataineh, K., Taamneh, Y. Performance analysis of stand-alone solar dish Stirling system for electricity generation (2017) International Journal of Heat and Technology , 35 (3), pp. 498-508.
17	Taamneh, Y. , Bataineh, K. Mixed convection heat transfer in a square lid-driven cavity filled with Al ₂ O ₃ -Water Nanofluid (2017) Strojnicki Vestnik/Journal of Mechanical Engineering , 63 (6), pp. 383-393.
18	Taamneh, Y. , Bataineh, K. Improving the performance of direct contact membrane distillation utilizing spacer-filled channel (2017) Desalination , 408, pp. 25-35.
19	Taamneh, Y. , Sharadqah, S. The Removal of Heavy Metals from Aqueous Solution Using Natural Jordanian Zeolite (2017) Applied Water Science , 4, pp. 2021-2028.

20	Taamneh, Y., Al-Shyyab, A. Improvement of the performance of a solar still by utilizing the sorption thermal storage of natural Zeolite (2016) Desalination and Water Treatment , 57 (57), pp. 27450-27457.
21	Taamneh, Y. Influence of Jordanian zeolite on the performance of a solar still: Experiments and CFD simulation studies (2016) Water Science and Technology: Water Supply , 16 (6), pp. 1700-1709.
22	Bataineh, K., Taamneh, Y. Review and recent improvements of solar sorption cooling systems (2016) Energy and Buildings , 128, pp. 22-37.
23	Bataineh, K.M., Taamneh, Y. Novel rotating cone viscous micro pump (2013) International Journal of Engineering Systems Modelling and Simulation , 5 (4), pp. 188-196.
24	Taamneh, Y., Omari, R., Numerical Simulation of Fluid Flow and Heat Transfer in a Porous Microchannels Saturated with Power-Law Fluid (2013) Journal of fluids , 1, pp. 1-9
25	Taamneh, Y., Al Dwairi, R., The Efficiency of Jordanian Natural Zeolite for Heavy Metals Removal (2013) Applied Water Science , 1, pp. 77-84
26	Taamneh, Y., Taamneh, M.M. Performance of pyramid-shaped solar still: Experimental study (2012) Desalination , 291, pp. 65-68.
27	Taamneh, Y., Bataineh, K.M. Drag and Separation Flow Past Solid Sphere with Porous Shell at Moderate Reynolds Number (2011) Transport in Porous Media , 90 (3), pp. 869-881.
28	Taamneh, Y. Non-newtonian fluid flow around ellipsoidal particle (2011) International Journal of Fluid Mechanics Research , 38 (2), pp. 111-121.
29	Taamneh, Y. CFD simulations of drag and separation flow around ellipsoids (2011) Jordan Journal of Mechanical and Industrial Engineering , 5 (2), pp. 129-132.
30	Taamneh, Y. Numerical simulation of fluid flow in enclosed rotating filter and disk (2010) Journal of Engineering and Applied Sciences , 5 (9), pp. 48-53.
31	Taamneh, Y., Ripperger, S. Performance of single and double shaft disk separators (2008) Physical Separation in Science and Engineering , 2008, art. no. 508617.
32	Taamneh, Y., Ripperger, S. Microfiltration with rotating membranes (2008) Filtration , 8 (3), pp. 204-209.
33	Taamneh, Y., Steinke, L., Ripperger, S. Particle classification by multishaft disk separator (2008) Chemical Engineering and Technology , 31 (7), pp. 1035-1038.

34	Steinke, L., Taamneh, Y. , Ripperger, S. Klassieren von Suspensionen mittels dynamischer Filtern (2008) Chemie Ingenieur Technik , 80 (9), pp. 1362-1363
35	Taamneh, Y. , Steinke, L., Ripperger, S. Einfluss der Geometrieverhältnisse auf die Separation mittels rotierender Membranen (2007) Chemie Ingenieur Technik , 79 (9), pp. 1475-1475.
36	Haddad, O.M., Al-Nimr, M.A., Taamneh, Y. Hydrodynamic and thermal behavior of gas flow in microchannels filled with porous media (2006) Journal of Porous Media , 9 (5), pp. 403-414.

PUBLICATIONS (CONFERENCE PAPERS)

No.	Title
1	Taamneh, Y. Effect of spacer orientation on the performance of direct contact membrane distillation, International Conference and Exhibition for Filtration and Separation Technology FILTECH, October 22-24, 2019 Cologne, Germany.
2	Taamneh, Y. , Al Dwairi, R. The capability of Jordanian natural Zeolite in industrial wastewater treatment, International Conference and Exhibition for Filtration and Separation Technology FILTECH, March 13-15, 2018 Cologne, Germany.
3	Taamneh, Y. Selective separation of heavy metals using natural Jordanian zeolite, International Conference and Exhibition for Filtration and Separation Technology FILTECH, October 11-13, 2016 Cologne, Germany.
4	Taamneh, Y. , Al Dwairi, R. Prediction of adsorption breakthrough curves of nickel on Jordanian zeolites, 8th European Congress of Chemical Engineering, September 25-29, 2011 Berlin, Germany.
5	Steinke, L., Taamneh, Y. Ripperger, S. Performance of dynamic filtration in particle classification. FILTECH, October 13-15, 2009 Wiesbaden, Germany.
6	Taamneh, Y. , Steinke, L., Ripperger, S. Particle deposition in rotating filter disk FILTECH , October 13-15, 2009 Wiesbaden, Germany.
7	Steinke, L., Taamneh, Y. , Ripperger, S. Klassieren von Suspensionen mittels dynamischen Filtern, Jahrestagung der ProcessNet-Fachausschüsse, Prozess, Apparate- und Anlagentechnik, 7-9 Oktober 2008 Karlsruhe, Deutschland.
8	Taamneh, Y. , Steinke, L., Ripperger, S. Investigation of Dynamic Filters Using CFD, 10 th World Filtration Congress, April 14-18, 2008 Leipzig, Germany.
9	Taamneh, Y. , Ripperger, S. Particle classification using dynamic filtration, 10 th World Filtration Congress April 14-18, 2008 Leipzig, Germany.

10	Steinke, L., Taamneh, Y. , Ripperger, S. Klassieren von Suspensionen mittels dynamischen Filtern, Jahrestreffen der ProcessNet-Fachausschüsse, Mechanische Flüssigkeitsabtrennung, February 18-20, 2008 Würzburg, Germany.
11	Taamneh, Y. , Steinke, L., Ripperger, S. Einfluss der Geometrieverhältnisse auf die Separation mittels rotierender Membranen. ProcessNet-Jahrestagung, October 16-18, 2007 Aachen, Germany.
12	Taamneh, Y. , Ripperger, S. Influence of the Geometric Ratio on the Separation Process Using Rotating Filter Media, GVC Fachausschüss-Sitzungen, Mechanische Flüssigkeitsabtrennung, March 12-14, 2007 Dresden, Germany.
13	Taamneh, Y. , Ripperger, S. Microfiltration with rotating membranes, 5 th European Meeting on Chemical Industry & Environment, May 3-5, 2006 Vienna-Austria.

PROFESSIONAL MEMBERSHIP

- Elected Member of Central Body of Jordan Engineers Association for the Term 2018-2021(3 years)
- Chairman of the Mechanical Engineering Branch Committee of Jordan Engineers Association; Irbid branch, 2018 -2021(3 years)
- Member of Jordan Engineers Association (JEA) Reg. No: 09928/03.
- Member of German Engineers Association (VDI) Reg. No: 10709579.
- Member of German Society for Chemical Engineering and Biotechnology (DECHEMA) Reg. No: 43868
- Member of Organization of Jordanian Graduates from German Universities (JADU)
- A Board Member of Journal of Environmental and Earth Science

ACTIVITIES AND COMMUNITY SERVICE

- Organizing the Scientific Open Day of Aeronautical Engineering Department. Jordan University of Science and Technology. Irbid, Jordan. April 30th, 2017.
- Participate in Organizing the Scientific Day of the Faculty of Engineering and Alumni Day, Jordan University of Science and Technology, December 2019
- Department Representative at the College of Engineering Council for the Academic years 2015-2018.
- Prepare ABET Accreditation Portfolio for Several Courses at Aeronautical Engineering Department.
- Member of the Courses Equivalence Committee of Aeronautical Engineering Department.

- Member of the Laboratories and Public Safety Committee of Aeronautical Engineering Department.
- Head of Department Safety and laboratory Committee for the Academic Year 2019-2020.
- Member of Department Social Committee for the Academic Year 2015-2020.
- Member of the Scientific Research Committee of Aeronautical Engineering Department.
- Served as a Member of Several Examination Committee for M.Sc and Ph.D students.
- Participate in training Al-Manaseer company engineers on hydraulic and centrifugal pump troubleshooting - Problems and Failures, April 2014.
- Engineering training supervisor of Aeronautical Engineering Department 2015-2018
- Member of the University Central Tender Committee, 2013-2014
- Teaching German language course to non-native speakers at Tafila Technical University, language center 2014.

ACTIVE REVIEWER FOR LARGE NUMBER OF JOURNALS:

- Journal of Porous Media
- Desalination
- Jordan Journal of Industrial Engineering
- Heat transfer-Asian research
- Desalination and Water Treatment
- Groundwater for Sustainable Development