



"CURRICULUM VITAE"

Professor Dr. Nabil H. Mahmoud
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Mechanical Power Engineering Dept.,
Faculty of Engineering, Menoufiya University,
Shebin El-Kom, EGYPT.

PERSONAL DATA:

Birth Date : August 3,1949
Nationality : Egyptian.
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I- DEGREES:

Ph.D., Menoufiya University, EGYPT, July 1986.
"Two-Phase Flow (Wet Steam) in Nozzles".
M.Sc., Menoufiya University, EGYPT, January 1980.
"Effect of the Geometrical Figure of Nozzles and Sharp-Edged Orifices on the Critical Flow Parameters".
B.Sc., Menoufiya University, EGYPT, May 1974.
"Mechanical Power Engineering", (V. Good).

II- GRANTS AND MISSIONS:

- 1- University Education Scholarship for the Ph.D. Degree in Mechanical Power Engineering Dept., Menoufiya University, EGYPT, 1980-1986.**
- 2- Scientific Mission in DeMontfort University, Leicster, UK, from 9-6-1999 to 8-12-1999.**

III- EXPERIENCES:

1- Employment History:

- a- 1974-1980: Demonstrator, Mechanical Power Engineering Dept., Menoufiya University, EGYPT .
- b- 1980-1986: Assistant Lecturer, Mechanical Power Engineering. Dept., Menoufiya University, EGYPT.
- c-1986-1992: Lecturer, Mechanical Power Engineering Dept. Menoufiya University, EGYPT,
- d- 1992-2001: Associate Professor, Mechanical Power Engineering Dept., Menoufiya University, EGYPT,
- e- 2001-Present: Professor, Mechanical Power Engineering Dept., Menoufiya University, EGYPT.

2- Teaching Undergraduate and graduate courses:

Thermal Power Stations, Steam Turbines, Steam Technology, Heat Transfer, Refrigeration and Air Conditioning Internal Combustion Engines Two Phase flow Engineering Drawing , Heat & Mass Transfer and Testing of Turbomachinery .

3-Consultants Experience:

About 20 years as a consultant in the field of Mechanical Power Engineering.

IV- FIELD OF INTEREST:

Heat & Mass Transfer, Two-Phase Flow and Thermal Engineering.

V- SUPERVISING AND SERVING ON THE GRADUATE COMMITTEES:

Completed Researches:

- 1- "Flow Through Supersonic Nozzles", M.Sc. Thesis, Abd-Ella, H.S., October 1989.
- 2- "Applied Study on Conservation of Steam Energy in the Industry", M.Sc. Thesis, El-Ghonimy A.M , 1995 .
- 3- "Two-Phase Flow of Natural Gas", Ph.D. Thesis, El-batawy, A.A , 2006.
- 4- " Study of Ejector Performance " , M.Sc. Thesis , Ashraf Amin El-Terhy , 2007.

VI- LIST OF PUBLICATIONS:

- 1- Weheba, S.M., Sabry, T.I., Khalifa, B.A. and Mahmoud, N.H. "Effect of Nozzle Geometrical Characteristics on the Critical Flow Parameters", The Third Int. Conference for Mechanical Power Eng. (ICMPE), Paper No. VIII-17, Menoufiya University, Cairo, EGYPT, Sept. 27 to Octo. 2,1980.**
- 2- Sabry,T.L, Khalifa, B.A., Ibrahim, K.A. and Mahmoud, N.H., "Non-Equilibrium Two-Phase Flow of Wet Steam Through a Nozzle", Engineering Research Bull., Faculty of Eng. & Tech., Menoufiya University, Vol. V, Part I, pp. 101-115,1983.**
- 3- Sabry, T.I., Khalifa, B.A., Ibrahim, K.A. and Mahmoud, N.H., "Effect of Condensation of Water-Vapour Mixture During Expansion in Nozzles", The Fifth Int. Conference for Mechanical Power Eng. (ICMPE), Paper No. IV.10, Ain Shams Univ., Cairo, EGYPT, October 13-15,1984.**
- 4- Sabry, T.I., Khalifa, B.A., Ibrahim, K.A. and Mahmoud, N.H., "Water Vapor Flows in a Convergent Nozzle", The Fifth Int. Conference for Mechanical Power Eng. (ICMPE), Paper No. IV.11, Ain Shams Univ., Cairo, EGYPT, October 13-15,1984.**
- 5- Sabry, T.I., Khalifa, B.A., Ibrahim, K.A. and Mahmoud, N.H., "Drage and Heat Tranfer Coefficients of Droplets in a Wet Steam Flow", The Seventh IASTED International Symposium on Measurements And Control, Istanbul, Turkey, pp 172-176, July 23-25,1985.**
- 6- Sabry, T.I., Khalifa, B.A., Ibrahim K.A. and Mahmoud, N.H., "Nonequilibrium Condensing Wet Steam Flow Through Nozzles", Engineering Research Bull., Faculty of Engineering & Tech., Menoufiya University, Shebin El-Kom, EGYPT, Vol. X, Part I, pp. 87-106,1988.**
- 7- Ibrahim, K.A., Hewedy, N.I., Mahmoud, N.H. and Shafiek, H., "Normal Shock Waves in Water Vapour Flow", The Third Conference on Aeronautical Sciences & Aviation Technology, Military Technical College, Cairo, EGYPT, Paper No. FD-2, pp. 331-344, April 4-6,1989.**
- 8- Sabry, T.I., Khalifa, B.A., Ibrahim, K.A. and Mahmoud, N.H., "Experimental Investigations of Wet Steam Flow Through Nozzles", Engineering Research Bull., Faculty of Engineering & Technology, Menoufia University, Shebin El-Kom, EGYPT, Vol. XI, Part I, pp. 77-94, 1989.**
- 9- Hewedy, N.I., Ibrahim, K.A., Mahmoud, N.H. and Shafiek, H., "Behaviour of Water-Vapour Flow Through the Relaxation Zone Behind a Shock Wave in a Convergent-Divergent Nozzle", Engineering Research Bull., Faculty of Engineering. & Tech., Menoufiya University, Shebin El-Kom, Vol.XI, Part I, pp. 139-157,1989.**

- 10- Hegazy, A.S. and Mahmoud, N.H., "Solar Still Assisted by Flat Reflectors Tracking the Sun", The Ninth Miami International Congress on Energy and Environment, Miami Beach, Florida, USA, December 11-13,1989.
- 11- Hegazy, A.S. and Mahmoud, N.H., "Finite Length Reflector for a Basin-Type Solar Still", The Ninth Miami International Congress on Energy and Environment, Miami Beach, Florida, USA, Dec. 11-13,1989.
- 12-Ramadan, F.A., Mahmoud, N.H. and Abd El-Hamied, A.A., "Heat & Mass Transfer from Droplet on a Heated Surface", The First Conf. Of the Egyptian Combustion Society, The Higher Technological Institute, Ramadan Tenth City, EGYPT, pp. 301-314, Dec. 26-28,1989.
- 13-Ramadan, F.A., Mahmoud, N.H. and Abd El-Hamied, A.A., "On Study of Droplet Motion in Stagnant Air Within a Straight Duct", The First Conf. Of the Egyptian Combustion Society, The Higher Technological Institute, Ramadan Tenth City, EGYPT, pp. 379-402, Dec. 26-28,1989.
- 14-Hewedy, N.I., Ibrahim, K.A., Mahmoud, N.H. and Shafiek, H., "Nonequilibrium Wet Steam Flow Through Supersonic Nozzles Involving Shock Waves", The First Conference Of the Egyptian Combustion Society, The Higher Technological Institute, Ramadan Tenth City, EGYPT, pp.243-261, Dec. 26-28,1989.
- 15- Mahmoud, N.H., "A Study of Nonequilibrium Wet Steam Flows in Supersonic Nozzles", The Third International Congress of Fluid Mechanics (ICFM3), Faculty of Engineering, Mansoura University, Cairo, EGYPT, Vol. IV, pp. 1671-1685, January 2-4,1990.
- 16- Mahmoud, N.H., "Investigation of the Acoustic Velocity in a Nonequilibrium Wet Steam Flow", The Fourth Conference on Aeronautical Sciences & Aviation Technology (ASAT), Military Technical College, Cairo, EGYPT, Paper TD-2, pp. 89-98, May 14-16,1991.
- 17- Mahmoud, N.H., "Variation of the Thermodynamic Speed of Sound in Wet Steam", The First International Conference of Engineering Research-Development and Application (ERDA-91), Faculty of Engineering & Technology, Suez Canal University, Port Said, EGYPT, pp. 271-282, November 26-28,1991.
- 18- Sabry, T.I., Mahmoud, N.H. and Abdalla, H.A., "Swirling Flow Through Convergent-Divergent Nozzles", The Second World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics", Dubrovnik, YUGOSLAVIA, pp. 107-111, June 23-28,1991.
- 19-Sabry, T.I., Mahmoud, N.H. and Abdalla, H.A., "Two-Dimensional Nozzle Performance with Swirling Supersonic Two-Phase Flow", Al-Azhar Engineering Second International Conference, Faculty of Engineering, Al-Azhar University, Cairo, EGYPT, pp. 390-403, December 21-24,1991.

- 20-Sabry, T.I., Abdel Mahboud, A.M. and Mahmoud, N.H., "Experimental Investigations Into Two-Phase Bubbly Flow in an Electrochemical Machining Gap", The Fourth International Conference on Fluid Mechanics (ICFM4), Faculty of Engineering, Alexandria University, Alexandria, Vol. IV, pp. 203-214, April 28-30,1992.
- 21-Mahmoud, N.H., "Condensation Coefficient and Wetness Thermal Losses of Wet Steam Flow", The Eighth Int. Conference for Mechanical Power Engineering (ICMPE-8), Faculty of Engineering, Alexandria University, Alexandria, EGYPT, Vol. 3, pp. 221-236, April 27-29,1993.
- 22-Sabry, T.I., Mahmoud, N.H. and El-Ghonimy, A.M., "A Theoretical Approach For Energy Saving in Industrial Steam Boilers", The First Int. Symposium on Heat Exchangers & Boilers (HEB-93), Egyptian Atomic Energy Authority, Alexandria, EGYPT, Vol. 1, pp. 175-195, June 23-24, 1993.
- 23- Mahmoud, N.H. and Abdel-Fattah, A., "A Theoretical Model Simulates Real Medium Characteristics of Steam Flow Through Pipes", The Int. AMSE Conference (Signals, Data & Systems), Association for the Advancement of Modelling and Simulation Techniques in Enterprises (AMSE), Bangalore, India, Vol. 2, pp. 211-224, Dec. 8-10,1993.
- 24- Mahmoud, N.A., "Two-Phase Flow of Very Low Quality Wet Steam Through Orifices", The Int. Conference on Fluid and Thermal Energy Conversion'94 Bandung Institute of Teczyhnology & University of Illinois, Kuta-Denpasar, Bali, INDONESIA,, Vol. 1, pp. 357-362, Dec. 12-15,1994.
- 25- Mahmoud, N.H. and Abdalla, H.A., "Flow in Two-Dimensional Nozzle with Mass Addition", The Int. Conference on Fluid and Thermal Energy Conversion'94, Bandung Institute of Technology & University of Illinois, Kuta-Denpasar, Bali, INDONESIA, Vol. 1, pp. 351-356, Dec. 12-15,1994.
- 26- Sabry, T.I., Mahmoud, N.H. and El-Ghonimy, A.M., "An Analytical Approach For Steam Energy Conservation in Combined Heat and Power Plants", Alexandria Engineering Journal, Faculty of Engineering, Alexandria University, EGYPT, Vol. 35, No.3, pp. (A163-A175), May 1996.
- 27-Moustafa, G.H., Alam El-Din, A.M. and Mahmoud, N.H., "Expansion of Supersonic Steam Flow through a Sudden Enlargement", Alexandria Engineering Journal, Faculty of Engineering, Alexandria University, Alexandria, EGYPT, Vol. 35, No.5, pp. (A265-A270), Sept. 1996.
- 28-Mahmoud, N.H. and Abdel-Fattah, A., "A Theoretical Model for Evaluating Real Medium Effects of Steam Flow Through Pipes", The Ninth Int. Confernece for Mechanical Power Engineering (ICMPE-9), pp. (H1-1:H1-17), Faculty of Engineering, Menoufiya University, Shebin El-Kom, EGYPT, Dec. 21-24,1996.

- 29-Sabry T.I., Mahmoud, N.H. and Abdel-Mahboud, A.M. "Theoretical and Experimental Investigations of Two-Phase Bubbly Flow Through an Electrochemical Machining Gap", Alexandria Engineering Journal, Faculty of Engineering, Alexandria University, Alexandria, EGYPT, Vol. 37, No. 3, pp. (A133-A150), May 1998.
- 30-EL-Kady, M.A., Mahmoud N.H. and Sileem, A.A., "Effect of Steam/Water Injection in Combustion Chambers on Pollutant Suppression", The Int. Conference on Energy Research & Development (ICERD), Kuwait University, State of Kuwait, Vol. II, pp. 768-777, Nov. 9-11,1998.
- 31- Mahmoud, N.H. "A Study of Supersonic Wet Steam Flow Including Shock Waves Through Constant Area Ducts-Part(I): Experimental Study, Part (II): Theoretical Analysis", Alexandria Engineering Journal, Faculty of Engineering, Alexandria University, Alexandria, EGYPT, Vol. 38, No.4, pp. (A311-A320) and pp. (A321-A332), July 1999.
- 32-Mahmoud, N.H., Hamed, M.H. and Abd El-Hamid, A.A., "Theoretical and Experimental Investigation of Particles Deposition in a Two-Dimensional Duct", Journal of Engineering and Applied Science, Faculty of Engineering, Cairo University, Giza, EGYPT, Vol. (47), Part (2), pp. 251-267, April 2000.
- 33-Mahmoud, N.H. and Singh, U., "Wetness and Losses Control Using Geometry Considerations in Low Pressure Steam Turbine Stages", Engineering Research Bulletin, Faculty of Engineering, Menoufiya University, Shebin El-Kom, EGYPT, Vol. (23), No.(2), pp. 119-149, April 2000.
- 34- Mahmoud, N.H., "Condensation Coefficient and Wetness Thermal Losses of Wet Steam Flow at Low Pressures", Engineering Research Journal, Faculty of Engineering, Minufiya University, Shebin El-Kom, EGYPT, Vol. (24), No.(2), pp. 113-133, April 2001.
- 35-Mahmoud, N.H., "Theoretical and Experimental Study of a Shock Tube Performance with Homogeneous Nucleation of Water Vapour", Engineering Research Journal, Faculty of Engineering, Minufiya University, Shebin El-Kom, EGYPT, Vol. (24), No.(3), pp. 127-145, July 2001.
- 36- Mahmoud, N.H., "Condensation Characteristics During Supersonic Flow of Organic Vapours", Engineering Research Journal, Faculty of Engineering, Minufiya University, Shebin El-Kom, EGYPT, Vol. (24), No.(4), pp. 1-31, October 2001.
- 37- Sabry T.I., Mahmoud , Huhn , J. , Mahmoud, N.H., Mofreh , H. Hamed , and El-Batawey, A. A. , " Adiabatic Two-Phase Flow of Natural Gas Through Variable Area Ducts " , WSEAS Trans . on Heat and Mass Transfer , Issue 1 , Vol. 1 , Jan. 2006, PP. 87-95 .

- 38- Sabry T.I., Mahmoud , Huhn , J. , Mahmoud, N.H., Mofreh , H. Hamed , and El-Batawey, A. A. , " Flow of Natural Gas Through Supersonic Nozzles " , Eng. Res . Bull. , Faculty of Eng. Minoufiya Univ. Vol. 29 , No. 4 , Oct. 2006 , PP. 289 – 300 .
- 39- Mahmoud, N.H., Mofreh , H. Hamed , Abdel-Hamied , A.A. and Hussien , A.A. " Gas-Solid Flow Through Ejector " , Eng. Res. Bullet ., Faculty of Eng., Minoufiya Univ. Vol. 30. No. 1 , Jan . 2007 , PP.43-51 .

VII- CONFERENCES PRESENTATION:

- 1- "The Third International Conference for Mechanical Power Engineering (ICMPE)", Menoufiya University, Cairo, Sept. 27 to Oct. 2,1980.
- 2- "The Fifth International Conference for Mechanical Power Engineering (ICMPE)", Ain Shams University, Cairo, October 13-15,1984.
- 3- "The Sixth International Conference for Mechanical Power Engineering (ICMPE)", Menoufiya University, Cairo, September 27-30,1986.
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- 5- "The First Conference of the Egyptian Combustion Society", The Higher Technological Institute, Ramadan Tenth City, EGYPT, December 26-28,1989.
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- 7- "The Fourth Conference on Aeronautical Sciences & Aviation Technology", Military Technical College, Cairo, May 14-16,1991.
- 8- "The First International Conference on Engineering Research Development & Application (ERDA-91)", Faculty of Engineering & Technology, Suez Canal University, Port Said, Egypt, November 26-28,1991.
- 9- "Al-Azhar Engineering Second International Conference (AEC-91)", Faculty of Engineering, Al-Azhar University, Cairo, Egypt, December 21-24,1991.
- 10-"The Fourth International Conference on Fluid Mechanics (ICFM4)", Faculty of Engineering, Alexandria University, Alexandria, Egypt, April 28-30,1992.
- 11-"The Eights International Conference for Mechanical Power Engineering (ICMPE)", Faculty of Engineering, Alexandria University, Alexandria, Egypt, April 27-29,1993.
- 12- "The First International Symposium on Heat Exchangers & Boilers (HEB-93)", Egyptian Atomic Energy Authority, Alexandria, Egypt, June 23-24,1993.
- 13-"International AMSE Conference (Signals, Data & Systems)", Association for the Advancement of Modeling and Simulation Techniques in Enterprises (AMSE), Bangalore, India, December 8-10,1993.

14- "The Ninth International Conference for Mechanical Power Engineering (ICMPE)", Faculty of Engineering, Menoufiya University, Shebin El-Kom, Egypt, December 21-24,1996.

15-"International Conference on Energy Research & Development (ICERD)", Faculty of Engineering, Kuwait University, State of Kuwait, November 9-11,1998.

Signature

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