

REZA, HOSSEINI-ABARDEH (Associate professor)



Education:

- PhD Brunel University, England (U.K) 1981
- MSc Brunel University, England (U.K) 1977
- BSc Ferdowsi University, Mashed Iran 1971

Positions

- Academic member of Mechanical Eng. Dept. Amirkabir University of Technology 1981
Chancellor of AmirKabir University of Technology 1983-1984
- Deputy of Ministry of Energy (Education) 1984-1986
- Member of Board of Directors and Head of Design and Engineering Dept of Azarab Industry 1988-1991
- Higher Education Advisor (Ministry of Culture and Higher Education) Ottawa Canada 1991- 1998.
- Director of Power Generation Research Center of NRI (Niroo Research Institute) 1998-2004
- Head of Thermo-Fluid group (Mechanical Eng.Dept.) 2006-2007
- Associate Dean of Research (Mechanical Eng Dept)

ACADEMIC INTERESTS

- Heat Transfer (General)
- Direct Energy Conversion
- Radiation heat transfer (Theory and Application), solar energy conversion
- Application of Selective Surfaces in Solar Energy Collectors.

COURSES TAUGHT

- 1- Heat Transfer (Undergraduate) I, II
- 2- Direct Energy Conversion (Graduate)
- 3- Radiation Heat Transfer (Graduate)
- 4- Application of Solar Energy (undergraduate)
- 5-Energy storage (Graduate)
- 6- Renewable Energy (Graduate)

THEISES UNDER SUPERVISION

- 1- Application of Micro Fins in Shell and Tube Heat Exchangers (evaporators and chillers).
- 2- Heat transfer in rotating disk (vertical and horizontal).
- 3- Heat transfer in eccentric vertical annulus, natural and forced convection.
- 4- Modeling and Calculation of a Media Evaporative Cooler.
- 5- Modeling and theoretical consideration of ice-melting phenomena.
- 6- Non-gray non isothermal gas radiation in two and three dimensional conduit.
- 7- Heat transfer from rotating disks and cylinder.

Publications In English

H. Taherian and R. Hosseini

"Electroplating Technique as a Method for Manufacturing Copper Constantan Thermocouples" Amirkabir Journal of Science and Technology Vol.15 No.57-B pp11-15 winter 2004.

R. Hosseini, H. Taherian

"Natural Convection Heat Transfer from a Vertical Plate to Air at Very Low Pressure
"Transactions of the CSME vol.28, No.2B, pp 309-319 (2004).

R.Hosseini, M.R.Heyrani-Nobari, M.Hatam.

"An Experimental Study of Heat Transfer in an Open – ended Vertical Eccentric Annulus with Insulated and Constant Heat Flux Boundaries" Applied Thermal Engineering. Vol. 25 No. 8-9 pp 1247-1257 (2005).

R.Hosseini, M. Soltani, G. Valizadeh

"Technical and economic assessment of the integrated solar combined cycle power plants in Iran" Renewable Energy, Vol.30 pp 1541-1555 (2005).

A.Beshkani, R.Hosseini

"Numerical Modeling of Rigid Media Evaporative Cooler" Applied Thermal Engineering Vol. 25 Issue 5-6 pp 636-643 (2006).

R.Hosseini,A Beshkani ,M.Soltani

"Performance improvement of gas turbines of Fars (Iran) combined cycle power plant by intake air cooling using a media evaporative cooler" Journal of Energy Conversion and Management 48 pp1055-1064 (2007).

R.Hosseini, A.Hosseini –Ghaffar, M.Soltani

" Experimental Determination of Shell Side Heat Transfer Coefficient and Pressure drop for an Oil Cooler Shell-and-Tube Heat Exchanger with Three Different Tube Bundles" Applied Thermal Engineering 27 pp1001-1008 (2007).

R.Hosseini, G.B.Ghraehptian, M.Nourolahi.

"Determination of OD Cooling System Parameters Based on Thermal Modeling of Power Transformer Winding "article in press. Simulation modeling and Practice(2008).

R.Hosseini.

"Thermal radiation properties of thin Molybdenum oxide films" Iranian Journal of Surface science and Engineering 2 (2007) 77-87.

R. Hosseini, B.E. Smith and J. K. Kritchley

"Investigations of molybdenum black coatings for use as solar selective absorbers". Surface Technology, 20, (1983), 321-330.

Conferences

- M. H. Hekmat shoar, R. Hosseini-Abardeh, Gholam Reza Moridi,
"The infrared spectroscopy of MoO_3 - P_2O_5 glasses". Proceeding of International Congress on Glass, March 2-7 1986 New Delhi-India.
- B. E. Smith, R. Hosseini, C. Faramakis and J. K. Crithchely,
"Are Molybdenum Coatings potential Solar Materials", Proceeding Solar world forum, Brighton U.K. August 1981 per gammon, Oxford 1981, pp 226-230.

Publications(In Farsi)

- R.hosseini, M.Vaziri, M.Bidi
"Temperature Distribution of a Non gray Gas between Two Parallel Planes Using Exponential Wide Band Model", Esteghlal, Journal of Engineering Isfahan University of Technology Vol. 24,No.1,Part 2, Summer 2005 PP 299-313.
- R.Hosseini, Y.Porasad, H.Nabati
"Experimental determination of heat transfer coefficient for stationary and rotating horizontal cylinder" Journal of Engineering of the University of Mazandaran Vol.12 No. 3, 4 autumn 2003-Winter 2004.
- R.Hosseini-Abrdeh, A. R. Ahrablou,
"Correction, Completion and Evaluation of a method for Measurement of Emissivity". Amirkabir Journal of Science and Technology No 8, 1987, pp 260-264.
- M.H. Hekmat-Shoar, R. Hosseini-Abardeh,
"Optical communication and fiber optics manufacturing Technology. Iranian Journal of physics No 4, 1986, pp 25-35.
- A.Beshkani, R.Hosseini
"Microturbine, a cogeneration gas turbine "Mechanical Engineering Magazine Vol.15 No.48 Sept .2006 pp 28-37.
- J.Ghazanfarian, R.Hosseini
"A glance at application of the cryogenic in space and medical "Mechanical Engineering Magazine Vol.16 No.55 (2007) pp62- 68.
- S.Ghadami –Badrloo , R.Hosseini
"Applications of Ultrasonic Transducers "Ofough No.16 (2007) pp 3-9

Conferences

- H.Nabati, M.Soltani-Hosseini, R.Hosseini, M.Ameri
"Technical and economic assessment of the inlet air cooling system application for power augmentation in the hot seasons for Ray power plant Fiat gas turbine unit".

Proceeding of 18th PSC conference 20-22 Oct 2003 Tehran-Iran Vol. 2, pp 203-213.

R. Hosseini, M. S. Aghighi, H.Taherian.

"Calculation of Maximum Efficiency of Thermoelectric Generators" "Proceedings of 3rd S.C. ISME (Iranian Society for Mechanical Engineers) Conference pp 225-232, 29-31 Oct 2002.

F. Fanaei, R. Hosseini, H. Nabati.

"Application of Multi Dimensional analysis of Power plant boilers" Proceedings of 3rd S.C.ISME (Iranian Society for Mechanical Engineers) Conference pp 365-371, 29-31 Oct 2002.

M. Rajabali, R. Hosseini, M. Rastegar

"Analysis of Fire Resisting Insulators and test of one such Material", Proceedings of 3rd S.C.ISME (Iranian Society of Mechanical Engineers) Conference pp 284-396, 29-31 Oct 2002.

M. Soltani-Hosseini, H.Nabatii, R. Hosseini-Abardeh,

"Modeling of Tous Power Plant furnace, by Zone Method", Proceeding of 16th International Power Generation Conference (PSC 2001) pp. 83-95

R. Hosseini-Abardeh, A. Abbasi, M.R. Shahnazari,

"Analysis of Mass Transfer of evaporation of elements in a drop with internal circulation", proceeding of 8th Mechanical Engineering Conference of Iran. Sharif University of Technology, 2000 pp.772-765.

Masoud Soltani-Hosseini, Reza Hosseini,Ahmad Beshkani

"Modelling and performance analysis of the evaporative coolers for power augmentation of GE-F9 gas turbines of Fars Combined cycle power plant" 20th International power system conference (PSC 2005) November 2005, Tehran

R.Hosseini, G.Ghareheptian, M.Norollahi

"Effective parameters on cooling of power transformers ,based on thermal modeling " 14th annual and 10th International conference on mechanical engineering ,Isfahan University of Technology ,Isfahan, April 2006

E.Sadeghian, R.Hosseini, G.Gharehepetian

" Review of current method of flow control in fans and electrical pumps in power plants and recommendation of use of adjustable electronic speed drives for energy saving"3rd Conference on Quality and Productivity in Electric Industry 18-19 June 2002 Tehran .

M.S.Aghighi, R.Hosseini

"Numerical solution of temperature and flux distribution in a gray media with heat sources" 13th annual and 9th International conference on mechanical engineering, Isfahan University of Technology, Isfahan, April 2005.

On Education and Technology :(In Farsi)

- R. Hosseini-Abardeh, K. Eslamlouian,
"Study of Average time of Completion of a Graduate degree in Science and Engineering at Canadian Universities." Iranian Journal" of Engineering Education No. 1 Vol 3, 2001, pp 119-133.
- R. Hosseini-Abardeh, N. Montazerin
"Technology Transfer, from Talk to Practice". Scientific-Technical Monthly Magazine of Electric Power Industry April and May 2000 pp 46-51.
- N. Montazerin, R. Hosseini-Abardeh,
"University, Mechanical Engineering and Industry ", Mechanical Engineering Journal No. 1, 2000, pp 50-54.
- R.Hosseini-Abardeh, R. Haghiighi-Khoshkhoo,
"Problems in Design and Manufacturing of power Generations Equipment in Iran". Proceeding of Second conference on domestic problems of manufacturing power Generations Equipment, Zanjan 1999.
- R. Hosseini-Abardeh,
"Analysis of system of Education at Graduate level" Iranian Journal of Engineering Education No 3, 1999, pp 13-29.
- R. Hosseini-Abardeh,
"Education, Technology and Industry" Amirkabir Journal of Science and Technology No 19, 1991, pp. 206-216.
- R.Hosseini
"One of the important new technologies: Electromagnetic spectrum" Foresight, Technology and Development Vision Conference, May 2006 Tehran Amirkabir University of technology.
- R.Hosseini
"Technology: Regrets and Hope, Foresight, Technology and Development Vision Conference, May 2006 Tehran Amirkabir University of technology.

Books

- M.T.Ebtekar, R. Hosseini-Abardeh, M.Ziaei, Persian Translation of Fundamentals of Classical Thermodynamics, by G. J. Van. Wylen, R. E. Sonntag. Center for university Publication 1994.
- R.Hosseini
Technical Supervision and Editor of Persian translation of "How New Technology Works" published by Atena and Pardis Park 2003.

Awards:

- Best MSc project supervision (Ali Nasab Award) ISME conference 2004 Isfahan.
Best presented paper at Foresight, Technology and Development Vision Conference 2006 Amirkabir University of Technology Tehran Iran