

**Scientific Activity of Prof. Naim Afgan at
Faculty of Mechanical Engineering and Naval Architecture,
University of Zagreb, Zagreb, Croatia**

by

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Professor Naim Hamdia Afgan worked at the Faculty of Mechanical Engineering and Naval Architecture of the University of Zagreb in the period 1981-1992 as a full professor at the Department of Power Engineering. He gave lectures in the courses "Steam Generators" and "Thermal Power Plants" at graduate study and courses "Energy Processes" and "Thermal Measurements" at postgraduate study.

The work of Professor Afgan at the Faculty of Mechanical Engineering and Naval Architecture, as a world recognized scientist and expert was particularly important for all employees, and especially young scientists at the beginning of their research careers. He brought new ideas from areas of heat transfer, CFD, expert systems and finally sustainable development.

He loved work with young researchers, engineers, and students, so Professor Naim Afgan was at the Faculty of Mechanical Engineering and Naval Architecture a mentor for two doctoral dissertations:

- Ž. Bogdan: Analysis of transient states in the steam generator of nuclear power plants, (in Croatian), Ph. D. thesis, University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, 1987.
- N. Popov: Analysis of the applicability of some constitutive correlations and sensitivity of the bypass phenomenon model in the downstream tract of a PWR reactor in an accident with complete coolant loss, (in Croatian), Ph. D. thesis, University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, 1988.,

and four master's theses:

- V. Žitko: Heat transfer at binary mixtures boiling on subatmospheric pressure, (in Croatian), M. Sc. thesis, University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, 1980.
- A. Majcen: Some testing methods of the wet steam influence in low-pressure parts of a turbine, (in Croatian), M. Sc. thesis, University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, 1981.
- M. Žakula: Experimental investigation of heat exchangers with plastic tubes, (in Croatian), M. Sc. thesis, University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, 1987.

- B. Hinić: Modeling of high temperature regenerative heat exchanger, (in Croatian), M. Sc. thesis, University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture, 1991.

As general secretary of the world recognized International Center for Heat and Mass Transfer advocated for participation in conferences of scientists from the field from the Faculty. After moving to Lisboa, he stayed in contact with the Faculty of Mechanical Engineering and Naval Architecture and established cooperation with IST – Lisboa. Among the results of this collaboration are the SDEWES conferences which are organized by the Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb.

Personally, I had the opportunity to work with Professor Naim Afgan as assistant at the Department of Power Engineering and later as secretary of the SDEWES conferences. Early in my career at a certain way directed my scientific research work in the field of heat and mass transfer at steam and gas turbines and heat pipes. He was a member of the committee for the evaluation of my master's thesis in the field of heat pipes.

For all of us at the Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb, Professor Naim Afgan will remain in lasting memory as a great teacher, world recognized scientist, intellectual and humanist. We are also proud that Professor Naim Afgan studied and graduated at our Faculty.

Many thanks, Professor Afgan
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