

Activity of Prof. Naim Afgan at Technical University of Lisbon, in Portugal

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Dear Colleagues, distinguished Guests, Ladies and Gentlemen,

I would like to start by thanking Prof. Neven Duic for organising this session dedicated to Prof. Naim Afgan, and for having invited me to deliver this short presentation on a chapter of his life.

After learning about Prof. Afgan's contribution as Scientific Adviser at Boris Kidric Institute of Nuclear Sciences in Vinca, as Professor of Mechanical Engineering and Chair in Energy Engineering at the University of Zagreb, and as a member of the Scientific Council and Secretary General of ICHMT, I have the pleasure to tell you about the period he spent at the Technical University of Lisbon, in Portugal.

I first encountered Prof. Naim Afgan in the framework of the conferences organised by the ICHMT, that he helped founding and that I started attending in the eighties. With both our careers as teachers and researchers focusing on similar fields of expertise and research, covering Energy Engineering and Heat and Mass Transfer, collaboration between us on related topics happened quite naturally and became more regular with time.

In the early years of the nineties, former Yugoslavia was, as you know, going through huge transformation, and Yugoslav scientists and professors were invited to eastern European research institutions in order to allow them to continue their research activities in a distinct environment. This is when, for instance, Prof. Kemal Hanjalic also joined the Friedrich-Alexander University Erlangen-Nürnberg as Guest Professor.

It was in this context that, in 1993, Prof. Afgan was invited as a Visiting Professor at the Technical University of Lisbon – my University – as a UNESCO chair holder, organising short courses on Sustainable Energy Management.

He was known for being a great professor, both in the classroom or in the laboratory. Colleagues and students, we all witnessed his full dedication and commitment towards teaching and research. But one of his main priorities was always to communicate and have appropriate platforms for presenting, discussing and exchanging views. Organising conferences, disseminating outcomes, writing scientific papers – this was in fact one of his main priorities. During the time he spent at IST, he continued having a crucial role in organising conferences and symposia, such as the International Conferences on New and Renewable Energy Technologies for Sustainable Development (Lisbon 1998, Madeira 2000, Azores 2002, Évora 2004).

Likewise, he used to say that nothing happened without being written before. With a clear passion and pleasure for writing and transposing views and conclusions to paper, I had occasion to work together

with Prof. Afgan on several publications throughout his years in IST, since the early nineties until the late two thousands.

I take this opportunity to highlight some of them, such as two books we published, the first on “Sustainable Assessment Method for Energy Systems - Indicators, Criteria and Decision Making Procedure” ⁱ; the second about “Quality, Sustainability and Indicators of Energy System” ⁱⁱ; as well as a chapter entitled “Sustainability Assessment of Energy Systems - An Overview of Current Status” included in “Geothermal Energy Resources for Developing Countries” ⁱⁱⁱ.

We also worked on several special issues of the “New and Renewable Energy Technologies for Sustainable Development” ^{iv}, as well as on a special issue about the “New and Renewable Energy Technologies” ^v. And we further collaborated in a number of referred articles for international journals and books on several topics, such as energy system sustainability or evaluation of natural gas resources.

Prof. Afgan was also essential when it comes to opening up a new avenue in research cooperation and allowing a more systematic collaboration between Western Europe researchers and hosting institutions, like IST, and those from Eastern countries, such as the Balkans, Russia, Turkey. Back then, Europe was much different from the one we live in today, and these exchanges and interactions were a novelty.

Moreover, Prof. Afgan presence at the IST’s Department of Mechanical Engineering was also crucial for attracting students and research graduates from former Yugoslavia to Lisbon. Prof. Neven Duić was one of those talented researchers that crossed Europe and, in 1994, became guest researcher in the Research Group on Energy and Sustainable Development.

In 2008, IST appointed Prof. Afgan Emeritus Professor as a way to show respect for his distinguished career and valuable contribution.

And if we are all together here, today, even if in many cases just virtually due to covid-19 constraints, it is definitely because of Prof. Afgan’s initiative and launch of the SDEWES conference series, which provide such a successful “platform for communication and exchange of ideas between scientist and researchers that promotes multidisciplinary approach to sustainability”.

I am personally and professionally very grateful our paths have crossed. Prof. Afgan paved the way and now it is up to us and those scientists and researchers that are building up on his work to carry on his legacy.

Thank you for your attention, I wish you a very successful conference.

List of publications

Books:

ⁱⁱ Afgan N, Carvalho MG, Quality, Sustainability and Indicators of Energy Systems, Begell House, US (2007)

ⁱ Afgan N, Carvalho MG, Sustainable Assessment Method for Energy Systems: Indicators, Criteria and Decision Making Procedure, Springer, US (2000)

Book chapters:

ⁱⁱⁱ Afgan N, Carvalho MG, Sustainability Assessment of Energy Systems - An Overview of Current Status. Geothermal Energy Resources for Developing Countries, Swets and Zeitlinger, Leiden (2002)

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Afgan N, Carvalho MG, New and Renewable Technologies for Sustainable Development, Kluwer Academic Publishers, Berlin (2002)

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Afgan N, Carvalho MG, Sustainability assessment of a hybrid energy system (08.2008)

Afgan N, Carvalho MG, Pilavachi PA, Martins N, Evaluation of natural gas supply options for southeast and central Europe: Part 2. Multi-criteria assessment (08.2008)

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Afgan N, Darwish M, Carvalho MG, Sustainability Assessment of Desalination Plants for Water Production, in Desalination, Nº 124, pp. 19-31 (1999)

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