



REPORT

On the Competition for the academic position “Associate Professor” in professional field “4.2. Chemical sciences”, specialty “Processes and apparatus in the chemical and biochemical technology”, announced for the Institute of Chemical Engineering (ICHE) Bulgarian Academy of Sciences (BAS) and

Published in “State Gazette”, issue 37 from 7th May 2021, as well as on the works presented by

The candidate Dimitar Nikolaev Kolev, Dr. Eng., “Trade and technology company” JSC

Prepared the report: Krum Angelov Semkov, Dr. Eng., Prof. - IChe - BAS, member of the Jury.

The presented works meet the volume and content requirements, they are described in detail and a USB Flash Drive CD with full electronic record is included. In the description a comprehensive analysis of the rating of the scientific works, as well as the personal Impact Factor (IF) are made. I accept the authors inquire about the reported contributions, as well as the reference to the corresponding works.

Besides the published works many patents (part of them with industrial implementation), projects of “Scientific Research” Fund, as well as participation in contracts for development and industrial implementation of novel technologies, devices and complex installation are presented.

The overall scientific and scientific-applied production is well enough published, according to the multiple citations found. All industrial implementations are documentary confirmed by the corresponding institutions.

The main directions of the scientific and scientific-applied activity of the candidate lie in two fields: i) Energy efficiency improvement through heat utilization from waste products – technological exhaust/flue gases or effluent; ii) Reduction of the harmful pollutions to the environment (atmosphere, water and soil) through purification or utilization. For this purpose, appropriate technologies and devices are developed and proposed, based on an internal energy integration, as well as on the processing of the waste products to useful raw materials.

I would like to underline the productive scientific-applied activity of the candidate. He proposes not only ideas, but real devices, apparatuses and plants, already implemented of proved economic and ecologic effects. In all these objects he assisted personally applying his engineering skills.

The candidate presents a considerable teaching activity, as well.

I know well Dimitar Kolev in person. We have worked in one and the same team, in the same field, I took a part in some of the industrial implementations, as well. My personal impressions are very good, and I think he would be useful member of IChE team continuing the work in the described direction. In this connection I would like to ask him the question: what his own concept about his further activity in the Institute is?

My only critical remark is that his last publication is from 2013, perhaps due to his professional engagements.

Conclusion: The evaluation of the presented activities shows, that the candidate satisfies all requirements of IChE for the desired academic position and for some of the indexes (e.g. citations found) essentially surpasses the minimal values. On this base I support the candidature of Dr. Eng. Dimitar Kolev and recommend to the scientific Jury to confer him the academic position” Associate Professor”.