

## Press release

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<http://www.efce.org>

### Process Intensification Award recognises outstanding research on high-purity hydrogen production

**Dr. Andy Antzara** has been awarded the **2018 EFCE Excellence Award in Process Intensification**. The Award was conferred upon him for his excellent PhD thesis "*Intensification of sorption enhanced steam methane reforming for high-purity hydrogen production*"

The judges praised the thesis for being both innovative and useful for the production of high-purity hydrogen (up to 99%), being of the highest importance for the future energy demand and energy storage as energy carrier. Developed by Antzara, a new path for hydrogen production via a novel intensified process concept by combining two loops, namely that of calcium and chemical to produce pure hydrogen in a single step with a lower carbon footprint and reduced energy demand, was demonstrated experimentally for the first time. It confirmed the high potential and significant advantages of the combined concept as an intensified route for the conversion of natural gas.

The jury also noted that Andy Antzara had published seven publications in highly prestigious scientific journals with a cumulative impact factor of 38.5, which have received more than 200 citations. In a short period of time, he also managed to accomplish multiple experimental techniques and computational methods.

Andy Antzara obtained his Diploma and PhD degree in Chemical Engineering from Aristotle University of Thessaloniki, Greece. Currently, he holds the position of Post doctoral researcher at the Department of Chemical Engineering, Aristotle University of Thessaloniki.

Nominating Andy Antzara for the award, Professor Angeliki A. Lemonidou, stated: "Dr. Andy Antzara is an ambitious young researcher with drive and ability to make a significant impact in the field of reaction engineering and especially in process intensification of energy related processes via combining reaction and separation in a single step ..."

The prize consists of a certificate and €1500 cash prize, a travel grant and an invitation to attend the 2nd International Process Intensification Conference – IPIC2, where the prize will be awarded on Monday, 27 May 2019. Furthermore, he is invited to give a scientific presentation of 15 minutes on Wednesday, 29 May 2019 at 9:15 h.



The 2019 Excellence Award in Process Intensification is generously sponsored by Microinnova Engineering GmbH.



Ends

## Related links

EFCE media centre (<https://efce.info/Media+Centre.html>)

Working Party on Process Intensification ([https://efce.info/WP\\_PI](https://efce.info/WP_PI))

2nd International Process Intensification Conference – IPIC2  
(<https://kuleuvencongres.be/ipic2019>)

## Notes to media:

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## About chemical engineers

Chemical, biochemical and process engineering is the application of science, maths and economics to the process of turning raw materials into everyday products. Professional chemical engineers design, construct and manage process operations all over the world. Oil and gas, pharmaceuticals, food and drink, synthetic fibres and clean drinking water are just some of the products where chemical engineering plays a central role.

## About EFCE

Founded in 1953, The European Federation of Chemical Engineering (EFCE) is a non-profit-making association, whose object is to promote co-operation in Europe between non-profit-making professional scientific and technical societies in 30 countries for the general advancement of chemical engineering and as a means of furthering the development of chemical engineering. See [www.efce.org](http://www.efce.org)

## About the sponsor

Microinnova Engineering GmbH designs efficient chemical and separation processes by means of process intensification and flow chemistry. As specialist of innovative process technology Microinnova offers customers continuous manufacturing with an end-to-end solution ranging from syntheses over work up to liquid formulation. These customer specific solutions are characterized by quality by design. The product portfolio ranges from process development to production plant solutions in tons-per-hour scale.