

## **Dr Petar Sabev Varbanov**

Deputy Head of "Sustainable Process Integration Laboratory – SPIL", NETME Centre, Faculty of Mechanical Engineering, Brno University of Technology - VUT Brno, Czech Republic

Dr Varbanov is Deputy Head of SPIL – Suistainable Process Integration Laboratory, NETME Centre, FME, Brno University of Technology – VUT Brno, Czech Republic. His main fields of activity are energy saving and efficiency, development and implementation of Process Integration, Total Site and regional integration for energy and water – including industry interaction interfaces, retrofit, waste to energy, wastewater minimisation leading to GHG and water footprints reduction.

Petar Varbanov has got PhD in 2004, in Process Integration from UMIST (within the top-10 technology universities in the World ranking for 2004. Now – The University of Manchester, UK) with distinction, with the thesis "Optimisation and Synthesis of Process Utility Systems", completed in collaboration with Aspentech, Shell Global Solutions, MW Kellog and BP. Dr Varbanov was awarded a grant by the Tyndall Centre for Climate Change Research (UK) as part of the PhD course.

He has been twice the Fellow of Marie Curie research grants – an Individual Intra-European Fellowship Grant (2004-2006) for 2 y research at the Institute of Process Dynamics and Operation – Berlin University of Technology, followed by a grant for establishing a team at the University of Pannonia, Hungary (2007-2008), where he served as the Deputy Head of the Centre for Process Integration and Intensification CPI² until February 2016, when he won the post at SPIL in Brno, Czech Republic. He has been also an Associate Professor at the Centre for Process Systems Engineering & Sustainability – Pázmány Péter Catholic University.

He has been a long term Scientific Secretary of and since 2018, the Co-Chair of the Conference on Process Integration for Energy Saving and Pollution Reduction – PRES (www.conferencepres.com), member of the International Scientific Committee and chair of the Poster Evaluation Committee of the International Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES) international conference (www.sdewes.org), as well as member of the Scientific Committee of the Sustainable Process Integration Laboratory Scientific—SPIL conferences. He has been successful Managing Guest Editor and Guest Editor of Journal of Cleaner Production, Energy, Applied Thermal Engineering, Computers and Chemical Engineering.

He served as the Scientific Secretary of CAPE-WP of the European Federation of Chemical Engineering (2012-2018). He is the European Editor of the Springer Journal "Clean Technologies and Environmental Policy" and the Subject Editor of the Elsevier "ENERGY – The International Journal".

Recently he has been contributing to more than 20 EC co-funded and other research and demonstration projects. He has published over 220 papers listed in SCOPUS. He is a co-author of three books and several chapters in books. He has been external PhD examiner at the University of Surrey, The University of Manchester, University Mohammed I — Oujda. According to the Publons.com metrics, his H-index is 26, with a total number of citations 2620 for 186 publications in the WoS database, with 863 verified reviews and 1219 editor records.

His research has been successfully implemented in collaboration with industrial partners: BP-Coryton, BP-Grangemouth, MOL Százhalombatta, HU, Bayer, DE, IPLOM – Busalla, IT. He

has been actively collaborating with HUNTSMAN Processing & Engineering – Basel (CH), Process Integration Ltd (UK), Cal Gavin (UK), Akstionernoe Obshchestvo 'Sodrugestvo-T' (UA), Makatec Apparate GmbH (DE), The University of Manchester (UK), University of Bath (UK), Paderborn University (DE), EMBaffle (NL), University of Maribor (SI), Pannon Novum Regional Innovation Centre (HU), Chamber of Commerce Nagykanizsa (HU), Julius Montz GMBH (DE), Process Design Centre BV (NL), Scottish Power Generation Ltd (UK), Centre for Research and Technology Hellas (GR), Imperial College London (UK), ETH Zürich (CH); National Technical University of Athens (GR), University of Zagreb (HR), Aristotle University of Thessaloniki (GR), Kharkiv Polytechnic Institute (UA), The Hashemite University (JO), University Mohammed I (MA), Bayer (DE), MOL (HU), ENN Group Ltd (CN), IPLOM Refinery (IT)