

Izv. prof. dr. sc. Jakov Baleta



Jakov Baleta zaposlen je kao izvanredni profesor na Metalurškom fakultetu Sveučilišta u Zagrebu, gdje također obnaša funkciju predstojnika Zavoda za mehaničku metalurgiju. Područja istraživanja uključuju racionalno korištenje energije u zgradarstvu i industriji s naglaskom na dizalice topline, razvoj i implementaciju numeričkih modela filmova kapljevine na stjenci u okviru Eulerovog pristupa te modela interakcije spreja i stijenke u okviru Lagrangeove višefazne metode, modeliranje rasplinjavanja biomase, izgaranje amonijaka, numeričko modeliranje nastanka i uklanjanja polutanata tijekom izgaranja, hlađenja turbinskih lopatica i prijenosa topline korištenjem nanofluida kao medija. Voditelj je dva znanstvena projekta te djeluje kao suradnik na još tri ESI projekta. Autor je 44 znanstvena rada indeksiranih u bazi Scopus s trenutnim h-indeksom 15. Višegodišnji je gostujući urednik VSI SDEWES special issue u časopisima Journal of Cleaner Production i Cleaner Engineering and Technology te pridruženi urednik časopisa The Holistic Approach to Environment i Cleaner Engineering and Technology. Dobitnik je četiri medalje na međunarodnim sajmovima inovacija te je mentor dvojice doktoranada.

Jakov Baleta is Associate Professor at the Faculty of Metallurgy at the University of Zagreb, where he also holds the position of the head of the Department of Mechanical Metallurgy. His research areas include rational use of energy in buildings and industry with an emphasis on heat pumps, development and implementation of numerical models of liquid wall film formation within the Eulerian approach and spray-wall interaction models within the Lagrangian multiphase method, biomass gasification modelling, ammonia combustion, numerical modelling formation and removal of pollutants during combustion, cooling of turbine blades and heat transfer using nanofluid as a medium. He is the principal investigator on two scientific projects and works as a partner on three additional ESI projects. Prof. Baleta is an author of 44 scientific papers indexed in the Scopus database with current h-index of 15. He was a guest editor of the VSI SDEWES special issue in the Journal of Cleaner Production and Cleaner Engineering and Technology and serves as associate editor of The Holistic Approach to Environment and Cleaner Engineering and Technology. At international innovation fairs he was awarded four medals. Currently, he is supervisor of two PhD students.