Comments from the recipient

This is a great honor for me to receive the prestigious Young Researcher Paper Award 2021 of the esteemed journal Sensors and Materials, which is a peer-reviewed reputable scientific journal in the field of sensors and sensing materials, the focus of my research work. The awarded study was conducted under the mentorship of my Ph.D. supervisor Prof. Goran Stojanovic, Faculty of Technical Sciences, University of Novi Sad, Serbia, and in cooperation with Prof. Vladimir Srdic, Faculty of Technology, University of Novi Sad. I express my gratitude towards the co-authors and the whole team of researchers who supported and contributed to this work. This research was carried out with financial support from the three different agencies, European Union's Horizon 2020 research and innovation programme under Marie Skłodowska-Curie grant No. 813680 (AQUASENSE), Slovenian Research Agency (ARRS grant L2-6769), and Ministry of Scientific and Technological Development, Higher Education and Information Society of the Republic of Srpska under project No. 19.032/961-83/19. In our study we discussed the processing, fabrication, and characterization of tin oxide (SnO₂)-based interdigitated biosensor structures and their sensing properties against various pathogens using impedance microbiology and self-resonant frequency methods. Candida albicans and Pseudomonas aeruginosa were used as targeted pathogen systems for the sensing analysis, which are highly important for water/food quality monitoring. The SnO₂-based biosensor shows very promising sensing properties when exposed to the pathogens. Our team is currently investigating the development of advanced electrochemical biosensors on wearable and flexible platforms for real the time monitoring of multiple analytes using an innovative system of connected sensors.

Akhil Chandran MK

