

2nd International Conference on

Nanostructured Materials & Nanochemistry

November 02-03, 2018 | San Francisco, USA



Soheli Farhana

University of Kuala Lumpur, Malaysia

A real-time mobile biosensor measurement and monitoring system

The quick finding of irresistible sicknesses and auspicious inception of appropriate treatment are basic determinants that advance ideal clinical results and overall population. Traditional diagnostics for irresistible ailments are tedious and require stationary diagnosis centers, experienced laboratory personnel and cumbersome hardware. Recent advances in the biosensor are able to perform diagnostics perform better with less complex compared to ordinary equipment. But the difficulties to be defeated incorporate with the measurement system such as very bulky, bigger size, cost-effective and stationary. In this research, a real-time biosensor measurement and monitoring system are proposed and designed. The system consists of a Texas Instrument (TI) CC3200 Launchpad controller with an onboard wireless system for communication and processing purpose. An LMP91000 Analog Front End (AFE) connected with CC3200 is used as the onboard potentiostat. An LCD panel also mounted on board on the CC3200 for monitoring purpose. A dc 5V input is sufficient for operating the CC3200 controller board, where the potentiostat is getting 3.3V from the controller to operate itself. The electrochemical measurement can be carried out using this proposed system which is embedded with a potentiostat (LMP91000) and Texas Instrument (TI) CC3200 with Wi-Fi module-on-Chip for communication and processing.

Biography

Soheli Farhana has completed her PhD in engineering from International Islamic University Malaysia and a postdoctoral fellowship from International Islamic University Malaysia, Malaysia. She was the visiting researcher at ONE Lab, MIT. She has published more than 15 papers in reputed journals and has been serving as an editorial board member of reputed journals and also serving as the committee member in several conferences.

soheli.farhana@live.iiu.edu.my

Notes: