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Pacific Biosciences adds new products to its portfolio

26 October 2014 | News | By BioSpectrum Bureau

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Pacific Biosciences has announced the release of P6-C4, a new chemistry software designed to enhance the performance and output of the platform by 45 percent. The latest release increases read length and improves accuracy to further accelerate innovative genomic research in complex organisms such as humans, plants, and animals.

The new release, P6-C4, represents the company's 6th generation of polymerase and 4th generation chemistry, further extending the industry's leading average read length to 10,000 - 15,000 bases, with the longest reads exceeding 40,000 bases. The throughput with the new chemistry is expected to be between 500 million to 1 billion bases per SMRT Cell, depending on the sample being sequenced. By providing an increasing number of longer reads per instrument run, the new chemistry enables users to assemble genomes at a higher quality.

The P6-C4 chemistry will replace the P5-C3 chemistry and is recommended for all SMRT Sequencing applications, including de novo assembly, targeted sequencing, isoform sequencing, minor variant detection, scaffolding, long-repeat spanning, SNP phasing, and structural variant analysis.

"The performance of this new chemistry reflects our commitment to consistently deliver significant improvements in throughput and accuracy to our expanding user base," said Mr Kevin Corcoran, senior vice president of market development, Pacific Biosciences. He added, "With the longest reads now exceeding 40,000 bases, SMRT Sequencing is rapidly becoming the go-to platform for phasing complex genomic regions like full-length HLA genes, and generating gold-standard genome assemblies."