## सीएसआईआर-उत्तर पूर्व वर्ज्ञान तथा प्रोद्योगिकी संस्थान, जोरहाट, असम CSIR - NORTH-EAST INSTITUTE OF SCIENCE AND TECHNOLOGY, JORHAT (ASSAM), INDIA

This is to inform that in the tender for "Supply and Installation of Gas Chromatography" having Tender ID "2019\_CSIR\_40279\_1", some points have been revised and the same may be read as under:

Earlier Specification	Revised may be read as
<ul> <li>In the heading Analyzer Basic Feature</li> <li>GC with suitable Detector along with original licensed windows software and inlets along with auto sampler for minimum of 1 or more. GC must be capable to accommodate at least four de &amp; two injectors in working conditions simultaneously. Inst should be capable of Retention time locking.</li> </ul>	<ul> <li>GC with suitable Detector along with original licensed windows-based software and inlets along with auto sampler for minimum of 15 vials or more. GC must be capable to accommodate at least four detectors &amp; two injectors in working conditions simultaneously. Instrument should be capable of Retention time locking or equivalent facility.</li> </ul>
<ul> <li>It must consist of Autosampler, one Programmable On Column Injector/PTV, one Programmable split splitless capillary inject Flame Ionization Detector (FID), one Flame photometric detect and Cryogenic cooling facility.</li> </ul>	<ul> <li>It must consist of Autosampler, one On Column Injector/PTV, one Programmable split splitless capillary injector, one Flame Ionization Detector (FID), one Thermal Conductivity Detector (TCD), one Electro Chemical Detector (ECD), one Flame photometric detector and Cryogenic cooling facility.</li> </ul>
In the heading Autosampler	
• Sampling volume - Capable to inject from 0.1 µl to 100 µl	• Sampling volume - Capable to inject from 0.1 µl to 50µl or better
• RSD of better than 0.3% RSD area reproducibility.	• RSD of better than 0.5% RSD area reproducibility.
<ul> <li>In the heading Injectors</li> <li>System must have pneumatic Electronic Flow Control for all in &amp; detectors. Pressure precision should be as good as 0.001 p.s.</li> </ul>	<ul> <li>System must have pneumatic Electronic Flow Control for all injectors &amp; detectors. Pressure precision should be as good as 0.1 p.s.i or better</li> </ul>
<u>Programmable On Column Injector/PTV – 1 no</u>	Programmable On Column Injector/PTV – 1 no
• Temperature programming up to 9 ramps at up to 750 degree C	Temperature programming ramp 3 or better
Programmable split/splitless injector / Multimode injector – 1 no	<b>Programmable split/splitless injector /</b> Multimode injector <b>- 1 no</b>
Nine-ramps temperature programming	Three-ramps temperature programming or better
<ul> <li>In the heading Detectors</li> <li>Flame Ionization Detector – 1 no</li> <li>Minimum detectable quantity: &lt; 3 pg C/sec in Octane standard equivalent /&lt;1.2 pg C/sec in tridecane standard or equivalent.</li> </ul>	<ul> <li>or Flame Ionization Detector - 1 no</li> <li>Minimum detectable quantity: &lt; 3 pg C/sec in Octane standard or equivalent /&lt;1.4pg C/sec in tridecane standard or equivalent.</li> </ul>
<ul> <li>Flame Photometric Detector – 1no</li> <li>Minimum detectable quantity: 1x 10<sup>-11</sup> g S/sec with Thiophene Maximum detectable quantity(MDL): &lt;45 fg P/s, &lt;2.5 pg S/s w methylparathion</li> </ul>	<ul> <li>Flame Photometric Detector – 1no</li> <li>Minimum detectable quantity: 1x 10<sup>-11</sup> g S/sec with Thiophene or Maximum detectable quantity(MDL): &lt;100 fg P/s, &lt;5 pg S/s with methylprathion</li> </ul>
<ul> <li>Electro Chemical Detector- 1 no</li> <li>Linear dynamic range: &gt;5 × 10<sup>-4</sup> or better.</li> <li>Uses β emission of &lt;15 mCi<sup>63</sup>Ni as the electron source.</li> </ul>	<ul> <li>Electro Chemical Detector- 1 no</li> <li>Linear dynamic range: &gt; 10<sup>-4</sup> or better.</li> <li>Uses β emission of &lt;15mCi<sup>63</sup>Ni as the electron source or compatible.</li> </ul>
The following is added in addition to above amendments:	

The system must be company tested with certificate of reproducibility of results with respect to standards. The standards must be supplied by the vendor.

## All other specifications, terms and conditions will remain same.