



List of Abbreviations

| | | |
|------------|---|--|
| ANOVA | - | Analysis of variance |
| AOB | - | Ammonium oxidizing bacteria |
| ARDRA | - | Amplified ribosomal DNA restriction analysis |
| BATH | - | Bacterial adherence to hydrocarbon |
| CDC | - | Centre for disease control |
| CFU | - | Colony forming unit |
| cm | - | Centimeter |
| C/N | - | Carbon/Nitrogen |
| CSLM | - | Confocal scanning laser microscope |
| DGGE | - | Denaturing gradient gel electrophoresis |
| DNA | - | Deoxy ribonucleic acid |
| DNRA | - | Dissimilatory nitrate reduction to ammonium |
| DO | - | Dissolved oxygen |
| eDNA | - | Extracellular DNA |
| EDTA | - | Ethylenediamine tetra acetic acid |
| EGTA | - | Ethylene glycol tetra acetic acid |
| EPS | - | Extra polymeric substance |
| ESEM | - | Environmental scanning electron microscope |
| E(Xi) | - | Effect of variable Xi |
| FAME | - | Fatty acid methyl ester |
| FISH | - | Fluorescent in situ hybridization |
| FNR | - | Fumarate nitrate reduction |
| GC | - | Gas chromatography |
| ICP | - | Inductively coupled plasma spectrometer |
| MM2-Ca | - | MM2 medium containing 10 mM of Calcium |
| MM2-Mg | - | MM2 medium containing 10 mM of Magnesium |
| MPN | - | Most probable number |
| Nap | - | Periplasmic nitrate reductase |
| Nas | - | Cytoplasmic nitrate reductase |
| <i>nar</i> | - | Nitrate reductase gene |
| Nar | - | Membrane-bound nitrate reductase |

| | | |
|------------|---|---|
| <i>nir</i> | - | Nitrite reductase gene |
| Nir | - | Nitrite reductase |
| NOB | - | Nitrite oxidizing bacteria |
| <i>nor</i> | - | Nitric oxide reductase gene |
| Nor | - | Nitric oxide reductase |
| <i>nos</i> | - | Nitrous oxide reductase gene |
| Nos | - | Nitrous oxide reductase |
| NTC | - | No template control |
| OTU | - | Operational taxonomic unit |
| PBS | - | Phosphate buffered saline |
| PCD | - | Programmed cell death |
| PCR | - | Polymerase chain reaction |
| PNB | - | Peptone nitrate broth |
| ppm | - | Parts per million |
| RFLP | - | Restriction fragment length polymorphism |
| RR | - | Relative rates of nitrate and nitrite reduction |
| rRNA | - | Ribosomal RNA |
| RNS | - | Reactive nitrogen species |
| SD | - | Standard deviation |
| SDS | - | Sodium dodecyl sulphate |
| TOC | - | Total organic carbon |
| VFA | - | Volatile fatty acids |
| WHO | - | World health organization |