

ABBREVIATIONS

Ahp: Alkyl hydroperoxide reductase enzyme

ATR: Attenuated total reflection

CAT: Catalase enzyme

CDOM: Coloured dissolved organic matter

CHROM: chromophore

CPC: Compound parabolic collectors

DSC: Differential scanning calorimetry

DNA: Deoxyribonucleic acid

DOM: Discrete Ordinate Method

ETEC: enterotoxigenic *E. coli*

EMW: Equivalent monochromatic wavelength

FTIR: Fourier transform infrared spectroscopy

GEMS: Global Enteric Multicenter Study

HT-GPC: High temperature gel permeation chromatography

HWT: Household water treatment

MDG: Millennium Development Goal

NADH/NAD⁺: Nicotinamide adenine dinucleotide

NCBI: National Center for Biotechnology Information

NOM: Natural organic matter

NREL: National Renewable Energy Laboratory

NRMS(L)E: Normal root mean square (logarithmic) error

PET: Polyethylene terephthalate

PC: Polycarbonate

PE: Polyethylene

PMMA: Polymethylmethacrylate

PP: Polypropylene

PS: Polystyrene

PPRI: Photo-produced reactive intermediates

PVC: Polyvinyl chloride

RHS: Reactive halogen species

RM: Regression model

RNA: Ribonucleic acid

ROS: Reactive Oxygen Species

RTD: Rate-determining step

RTE: Radiative transport equation

SDG: Sustainable Development Goal

SOD: Superoxide dismutase enzyme

SODIS: Solar water disinfection

SPA: Solar Position Algorithm

SQP: Sequential quadratic programming

TJC: Transparent Jerrycan

UDF: User defined function

UN: United Nations

ABBREVIATIONS

UV: Ultraviolet

Vis: Visible

WHO: World Health Organization