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Abbreviations and symbols

Abbreviations used in the thesis

AA	Acetic acid
AAI	Activated alumina
AELD	Acid-enhanced limestone defluoridation
AICN	Alumina-impregnated carbon nanotubes
AILS	Aluminium hydroxide impregnated limestone
ANOVA	Analysis of variance
AAS	Atomic Adsorption Spectroscopy
BIS	Bureau of Indian Standards
BC	Bismuth coal
CaF ₂	Calcium fluorite
CA	Citric acid
C	Community
CNF	Carbon nanofibers
CTAB	Cetyltrimethyl ammonium bromide
ED	Electro-dialysis
EDX	Energy Dispersive X-ray Spectroscopy
FTIR	Fourier Transform Infra Red
FAP	Fluorapatite
[F ⁻] ₀	Initial fluoride concentration
FC	Fine coke
H	Household
IISc	Indian Institute of Science
ISE	Ion selective electrode
LSD	Least significant difference
LDPE	Low-density polyethylene
LDH	Layered double hydroxide
LN	Lignite
MOCA	Manganese-oxide-coated-alumina
NF	Nanofiltration
n-HAP@Gel	Nano-hydroxyapatite in gelatine polymatrix
OA	Oxalic acid

Abbreviations and symbols

PA	Phosphoric acid
[PA] ₀	Initial phosphoric acid concentration
PACLT	Phosphoric acid-crushed limestone treatment
PAELD	Phosphoric acid-enhanced limestone defluoridation
p	Pearson's correlation
p-HAP	Porous-hydroxyapatite
PHED	Public Health Engineering Department
RO	Reverse osmosis
RPM	Revolutions Per Minute
SI _f	Saturation index of fluorite
SPSS	Statistical Package for the Social Sciences
SEM	Scanning Electron Microscopy
TEM	Transmission electron microscopy
TGA	Thermogravimetric analysis
TISAB	Total ionic strength adjustment buffer
THA	Treated hydrated alumina
TCLP	Toxicity characteristics leaching procedure
UHA	Untreated hydrated alumina
US	United State
USEPA	United State Environmental Protection Agency
WHO	World Health Organization
XPS	X-ray photoelectron spectra
XRD	X-ray Diffraction

Symbols used in the thesis

°C	degree centigrade
m	meter
cm	centimeter
eV	electron volt
g	gram
w	weight

Abbreviations and symbols

L	liter
M	mole
mg/L	milligram per liter
mg/g	milligram per gram
mL	milliliter
min	minute
μ M	micromole
μ m	micrometer
mM	millimolar
mol/L	mol per liter
mL/h	milliliter per hour
mm	milimeter
h	hour
s	second
K	Kelvin
J	Joule
S	siemen
V	volume
W	weight
θ	theta
α	alpha
λ	lamda
τ	tau