

NAME

kTe - thermal voltage

LIBRARY

Electrochemistry library - (**-libecx**, **-lecx**)

SYNOPSIS

```
pure elemental function kTe(T)result(r)
```

DESCRIPTION

Compute the thermal voltage: $kTe[V] = kB[eV] * (T[degC]+273.15)$

Parameters:

o T Temperature in degC

RETURN VALUE

real(dp) :: r

Thermal voltage in Volts.

NOTES

The C API is defined by the following prototype:

ecx_core_kTe(double *T, double *kTE, size_t n)

o T Temperature in degC

o kTe Output values for the thermal voltage in Volts

o n Size of T and kTe

No python wrapper.

EXAMPLE

Fortran scalar:

```
real(real64) :: T, value
value = kTe(T)
```

Fortran array

```
real(real64) :: T(:), value(:)
value = kTe(T)
```

C

```
size_t n;
double * T, *kTe;
ecx_core_kTe(T, kTe, n);
```

SEE ALSO

ecx(3)