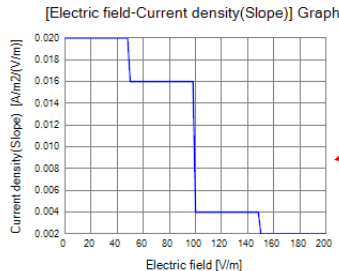
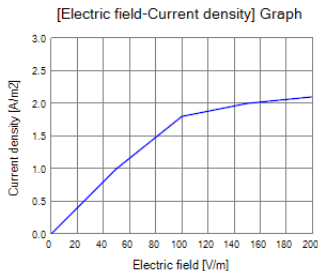
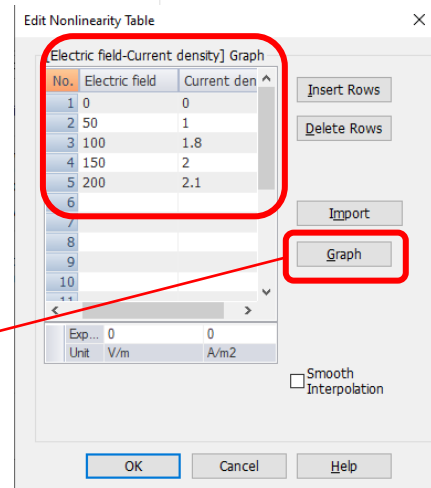
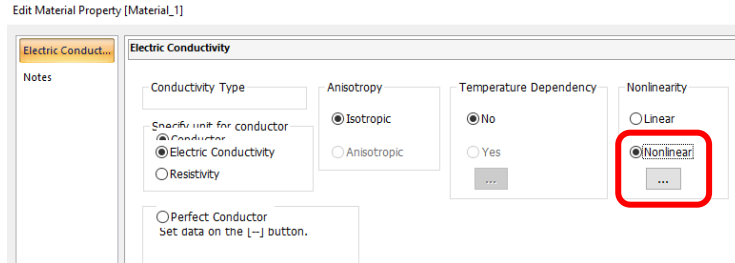


Question 6

Q: How to analyze nonlinear electric conductivity having electric field dependence?

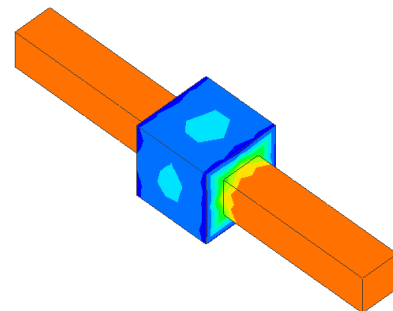
A: Set the electric conductivity that varies with respect to the magnitude of an electric field. Enter the electric field and current density in a table. Click the [Graph] button to check for intended waveforms.



- For nonlinear materials, iterative calculations will be performed until convergence is achieved.

Iterative Calculation Log

Iterations=107.☒		Residua=7.994409e-07			
The number of iterations	Maximum Number of Iterations	Nonlinear Error	Convergence Judgment	Maximum electric potential	Minimum electric potential
1	20	1.00E+00	1.00E-06	1.00E+00	0.00E+00
2	20	4.84E-02	1.00E-06	1.00E+00	0.00E+00
3	20	1.12E-02	1.00E-06	1.00E+00	0.00E+00
4	20	2.57E-03	1.00E-06	1.00E+00	0.00E+00
5	20	1.16E-04	1.00E-06	1.00E+00	0.00E+00
6	20	3.53E-05	1.00E-06	1.00E+00	0.00E+00
7	20	1.74E-05	1.00E-06	1.00E+00	0.00E+00
8	20	8.98E-06	1.00E-06	1.00E+00	0.00E+00
9	20	4.73E-06	1.00E-06	1.00E+00	0.00E+00
10	20	2.54E-06	1.00E-06	1.00E+00	0.00E+00
11	20	1.39E-06	1.00E-06	1.00E+00	0.00E+00
12	20	7.78E-07	1.00E-06	1.00E+00	0



Electric Potential Contour