

## Release notes for RESCU-2.5.0

1. **New** DFPT functions computing the electron-phonon interaction matrix faster using interpolation techniques.
2. **New** DFPT functions calculating the imaginary part of the electron self-energy due to electron-phonon interactions within the self-energy relaxation time approximation (SRTA) at finite temperature.
3. **New** DFPT functions computing the electron-phonon limited electron lifetime within the self-energy relaxation time approximation (SRTA) at finite temperature.
4. **New** tutorials for: equation of states (equilibrium lattice constant), valence band position, dielectric constant/tensor and defect formation energy and method transition level diagram.
5. **New** `potential.external` keyword to introduce an external field. This allows to determine the dielectric tensor, among other applications.
6. **New** occupancy scheme `fixedocc` allows setting occupancies to minimize dispersion effects in defect calculations.
7. **New** `makeVacuum` function creates vacuum atoms.

Note: Unless otherwise specified, bug fixes do not influence previous results.