TECHNICAL APPROACH

Sensing and monitoring in MATLAB workspace

Standalone/Grid connected TCT PV array — Stage 1

Non-uniform solar irradiance on TCT PV array — Stage 2

Data acquisition

Alert encountered — no / yes

Generate notification and activate reconfiguration action

Start

Initialize Qmatrix of partial shading

Choose the switching position of every PV module within the array

Generate optimal reconfigured matrix using fitness-function)

If termination criteria meet — no / yes

Send to MATLAB workspace

End

Generation of dynamic switching matrix using metaheuristics

Optimal reconfigured matrix

Dynamic array reconfiguration arrangement for TCT PV array

Stage 4

Stage 3: Electrical rewiring generation stage based on designed metaheuristic based switching matrix
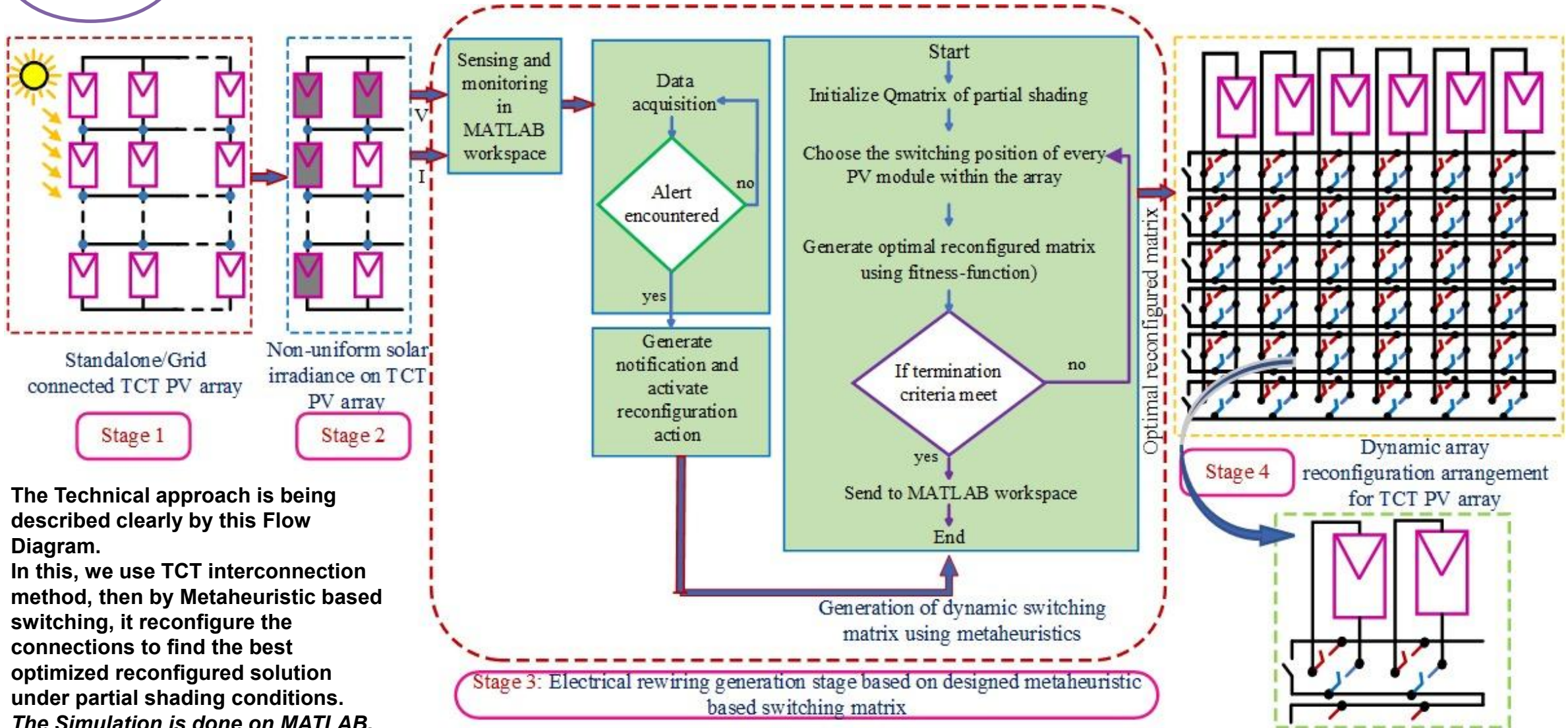
- The Technical approach is being described clearly by this Flow Diagram.
- In this, we use TCT interconnection method, then by Metaheuristic based switching, it reconfigure the connections to find the best optimized reconfigured solution under partial shading conditions.
- *The Simulation is done on MATLAB.*