

**Objective:** to allow users and developers to extend Nemo5's capabilities.

**Approach:**

[1] To Develop a python framework to create NEMO5 Input Decks

[2] To Create a scripting mechanism (using Python) to extend Nemo5's functionality.

**Results:**

- Python input decks supported on Nemo5
- Python Solvers (Nemo5 solvers wrote on python)
- Python Meta Solvers (set of solvers grouped in a container Solver "Meta")
- Python-Nemo is working with both shared and static libraries

```
#
# Input Deck (Python version) Generated By NEMOS InputDeckEditor
# version 0.1
# http://www.http://nanohub.org
#
from Container import *
structure = Structure ({
  Material ([
    { 'name': 'GaAs' },
    { 'tag': 'well' },
    { 'crystal_structure': 'zincblende' },
    { 'regions': '(1)' },
    { 'Bands:TB:sp3d5sstar_SO:param_Jancu:passivation_potential': '25' }
  ]),
  Domain ([
    { 'name': 'atomic_structure' },
    { 'type': 'pseudomorphic' },
    { 'base_material': 'well' },
    { 'dimension': '(5,1,1)' },
    { 'periodic': '(false,true,true)' },
    { 'crystal_direction1': '(1,0,0)' },
    { 'crystal_direction2': '(0,1,1)' },
    { 'crystal_direction3': '(0,-1,1)' },
    { 'space_orientation_dir1': '(1,0,0,0,0,0)' }
  ])
```

