```
from hpmc import Box
from rod_models import pp, ah, ap
from rod_models import ifba as pin

w = Box(X=pp, Y=pp, Z=ah + 2*ap) # water box
w.material = 'water'

w.dens.set_values(1)
w.temp.set_values(580.)

w.insert('pin', pin)

# needed in SCF interface:
fuel_key = ('pin', 'gap', 'fuel')
rod_key = pin.get_key()

# unify names
model = w
```