Community nanotechnology software development

Objective:

 Co-authored 8 nanoelectronics software tools that are freely available on NSF's nanoHUB.org.

Approach:

• A list of tools that were developed includes: <u>nanoFET</u>

<u>CNTFET</u>

QuaMC 2D

<u>Schred</u>

<u>nanoMOS</u>

<u>FETtoy</u>

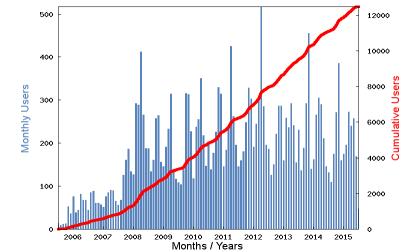
MOSFET

MOScap

Impact:

• As of July 15, 2015, these software tools have served over 12,400 individual users worldwide, running more than 570,000 simulations.

Users of Simulation Tools Authored by Shaikh S. Ahmed (12,465 Users)



Result:

• Simulation is an important research methodology in the fields of nanoscience and nanoengineering, and it is possible to accelerate the transformation of nanoscience to nanosystems through the integration of simulation with experimentation. However, simulator development itself is not enough—the tools need to be deployed to the user community so that it can be made more flexible and accurate.



