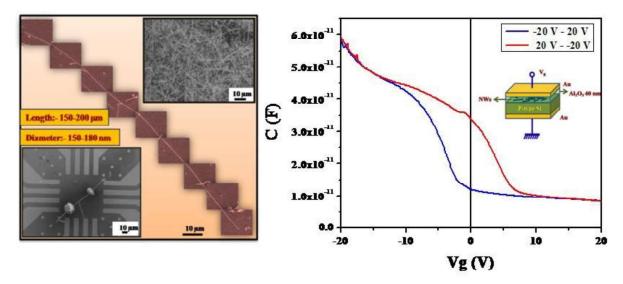
## Growth of Longest Cr doped Core-Shell Ge/GeO<sub>X</sub> Nanowire

Amar S. Katkar \*

E-mail: amarkatkar@gmail.com

Synthesis of ultralong, low diameter (High aspect ratio) and uniform nanowires could be useful for integration of multiple devices using one nanowire. In the present work simple vapor transport method was used to synthesize ultralong Cr-doped core-shell  $Ge/GeO_X$  nanowires . The conditions such as substrate temperature, precursors and required dopants were optimized for the growth of uniform ultralong Germanium nanowires. After characterizations the as prepared samples were utilized to investigate electrical and biological applications. The ultralong Cr-doped  $Ge/GeO_X$  nanowires could be very useful in future for the fabrication of electronic and biological devices.



## References:

C. L. Yuan and P. S. Lee, "Enhanced charge storage capability of Ge/GeO<sub>2</sub> core/shell nanostructure", *Nanotechnology* 19 (2008) 355206

<sup>\*</sup> Department of Physics, Dr. B.N.Purandare Arts, Smt. S.G. Gupta Commerce and Smt. S. A. Mithaiwala Science College, Valvan, Lonavla-410403, Maharashtra, India,