

**Atom technology seminar  
August 2, 2005  
IMRE, Seminar Room 1  
3 Research Link, Singapore 117602**



**Introduction and Welcome : Christian Joachim**

**9.00 AM Opening talk** : Christian Joachim, CEMES, CNRS, Toulouse, France  
“Technology Roadmaps for computing with a single molecule”

**Session I : The Atomic scale**

9.30 : Andrew Wee + C. Wei + Xu Hai, Dept. of Physics, NUS : "Surface Nanostructure Formation for Nanodevices" (exp.)

10.00 : Sun Yiyang + Liu Lei, Dept. of Physics, NUS : "First-principles study on structures of open metal surfaces" (DFT)

10.30 : Cedric Troadec + Deng Jie+ Jian Shu, IMRE : “Static nanostencil & atomic manipulation for nano-interconnects on MoS<sub>2</sub>”

**Coffee Break 11.00 to 11.30**

## **Session II : From the atomic scale to the micron scale**

11.30 : Sean O'Shea: "Connecting the Dots, IMRE: Strategies to connect the nanometre to micrometre scales"

12.00 : Thet+Chandra + Sean O'Shea+ Deng Jie, IMRE : "Limits and possibilities of nanostencils in nanofabrication"

12.30 : Yao Kui, IMRE : "Piezoelectric actuators for nano- and molecular device characterizations".

## **Lunch Break 1.00 to 2 PM**

## **Session III : Molecules and theory**

14.00 : Chen Zhikuan, IMRE : "Synthesis of conjugated oligomers for molecular electronics"

14.30 : Mark Saeys, Chemical and Biomolecular Engg., NUS : "First principles based modeling of electron transport through single molecules".

15.00 : Bai Ping, IHPC : "Molecular electronic device investigation using computational methods"

15.30 : Closing remarks – Christian Joachim

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