

Phan Van Cuong
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Department of Physics
Faculty of Electricity and Electronics
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EDUCATION

Bergen University, Bergen, Norway
Ph.D. in Molecular Dynamics Simulations, 2009-2012

Kyungpook National University, South Korea
Master of Science in Nanophysics, 2006-2008

Hanoi University of Science and Technology, Vietnam
Engineering in Information Technology, 1999-2003

Vinh University of Pedagogics, Vietnam
Bachelor of Science in Physics, 1993-1997

RESEARCH INTERESTS

- Nanophysics (synthesis, characterization, and application of nano materials)
- Molecular Dynamics Simulations (study the interactions between atom or molecule and surface)

RESEARCH EXPERIENCE

- **SSC – Ramore project** (Focused on molecular dynamics simulations to study the interactions between atom or molecule and surface), at the Department of Physics and Technology, University of Bergen, Norway, 2009-2012
- **Brain Korea 21 (BK21)** (Specialized in synthesis, characterization, and application of semiconductor nanomaterials) at the Nano Applied Physics Laboratory, Kyungpook National University, South Korea, 2006-2008
- **TR2004-33-06** (Designing, manufacturing data reception, storage and processing equipment, and displaying the experiment outcome by Laser diffraction, at the Department of Physics, Nha Trang University, Vietnam, 2004-2005)

TEACHING RESPONSIBILITY

Undergraduate

- Fundamental of Physics A

- Fundamental of Physics B
- Experimental Physics

PUBLICATIONS and PRESENTATIONS

Journals

1. **Phan Van Cuong**, Bjørn Kvamme, Tatiana Kuznetsova, and Bjørnar Jensen, Molecular dynamics study of calcite, hydrate and temperature effect on CO₂ transport and adsorption stability in geological formations, *Molecular Physics*, Vol. 110 (2012), pp.1097-1106.
2. **Phan Van Cuong**, Bjørn Kvamme, Tatiana Kuznetsova, Adsorption of water and CO₂ on calcite and clathrate hydrate: the effect of short-range forces and temperature, *INTERNATIONAL JOURNAL of ENERGY and ENVIRONMENT*, Vol. 6, Issue.3(2012), pp. 301-309.
3. **Phan Van Cuong**, Joonghoe Dho, Hyo Yeol Park, and Do-Hyung Kim, A sonochemical assisted synthesis and annealing temperature effect of La_{0.7}Sr_{0.3}MnO₃ nanoparticles, *Applied Physics A-Materials Science & Processing*, Vol. 95 (2009), pp.567-571.
4. **Phan Van Cuong** and Do-Hyung Kim, Effect of strontium doping level on electrical transport and magnetic properties of La_{1-x}Sr_xMnO₃ perovskite nanoparticles, , *Journal of Physics: Conference Series*, Vol. 187 (2009), pp.012090

Presentations

1. **Phan Van Cuong**, Tran Tien Phuc, Synthesis of Indium-Tin Oxide Nanostructures By Chemical Vapor Deposition Technique With Gold Catalyst And Self-Catalyst, the 4th International Workshop on Nanotechnology and Application (IWNA 2013), November 14 – 16, Vung Tau, Vietnam.
2. **Phan Van Cuong**, Tran Tien Phuc, Synthesis of the Indium-Tin Oxide nanowires by the Vapor-Liquid-Solid technique, National conference on Technical Physics and Applications, Hue, Vietnam, 8-12 October, 2013 (*Invited talk*)
3. **Phan Van Cuong**, Bjørn Kvamme, Tatiana Kuznetsova, and Bjørnar Jensen, The Impact of Short-Range Force Field Parameters and Temperature Effect On Selective Adsorption of Water and CO₂ On Calcite, International Conference on HEAT and MASS TRANSFER, 2012 January 25-27, Harvard, Cambridge, United States of America.
4. **Phan Van Cuong**, Bjørn Kvamme, and Tatiana Kuznetsova, Effect of temperature and calcite on carbon dioxide transport and hydrate stability in geological formations, Third

EAGE CO₂ Geological Storage Workshop, 2012 March 26 – 27, Edinburgh, United Kingdom.

5. **Phan Van Cuong**, Bjørn Kvamme, and Tatiana Kuznetsova, Molecular dynamics study of calcite and temperature effect on CO₂ transport and hydrate stability in geological formations, Thermodynamics 2011, 2011 September 1 – 3, Athens, Greece.
6. **Phan Van Cuong**, Bjørn Kvamme, and Tatiana Kuznetsova, Molecular dynamics study of mineral impact on mass transport and hydrate formation, European Geosciences Union, General Assembly 2011, 2011 April 03 – 08, Vienna, Austria.
7. Kvamme, B., Kuznetsova, T., Quasim, M., Vafaei, M.T., Chejara, A., Jemai, K., Baig, K., Jensen, B., **Cuong, P.**, Kivela, P.-K., Bauman, J, Multiscale modelling of CO₂ storage in cold reservoirs, CECAM workshop, 2011 June 22 – 24, Lausanne, Switzerland.
8. **Phan Van Cuong**, Joonghoe Dho, and Do-Hyung Kim, Effect of strontium doping level on electrical transport and magnetic properties of La_{1-x}Sr_xMnO₃ perovskite nanoparticles, Asean Workshop on Advanced Materials Science and Nanotechnology, 2008 September 15 – 20, Nha Trang, Vietnam.
9. Nguyen Hong Quang, **Phan Van Cuong**, and Do-Hyung Kim, Improvement of Adsorption Sites on Single-Walled Carbon Nanotube Bundles with Acid treatment, International Conference on Nano Science and Nano Technology, 2007 November 08 – 09, Gwangju, South Korea
10. Kim Soo-Ho, Roh Yong-Suk, **Phan Van Cuong**, Chang-Hwan Chang, Kim Do-Hyung, Morphology control of self-catalytic Indium Tin Oxide Nanowires by oxygen, Trends in Nanotechnology - TNT2007, 2007 September, 03 – 07, San Sebastian, Spain
11. Nguyen Hong Quang, **Phan Van Cuong**, and Do-Hyung Kim, Enhancement of the sensitivity of single-walled carbon nanotube-based gas sensor with acid stirring treatment, International Workshop on Nanotechnology and Applications, 2007 November 15 – 17, Vung Tau, Vietnam
12. **Phan Van Cuong**, Nguyen Hong Quang, and Do-Hyung Kim, La_{1-x}Sr_xMnO₃ perovskite nanoparticles. Sonochemical synthesis and their properties, International Workshop on Nanotechnology and Applications, 2007 November 15 – 17, Vung Tau, Vietnam
13. **Phan Van Cuong**, Nguyen Hong Quang, Joonghoe Dho, and Do-Hyung Kim, Grain-boundary effects on the electrical resistivity and ferromagnetic transition temperature in sonochemically-synthesized La_{0.7}Sr_{0.3}MnO₃ nanoparticles, International Conference on Nano Science and Nano Technology, 2007 November 08 – 09, Gwangju, South Korea

14. **Phan Van Cuong**, Kim Soo-Ho, Roh Yong-Suk, and Kim Do-Hyung, Nanorods of $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ by microwave irradiation method, Conference of the Korea Physical Society, 2007 April 19 – 20, PiengChang, South Korea.