

JIRASAK WONG-EKKABUT

Curriculum Vitae

NAME Jirasak Wong-ekkabut

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NATIONALITY Thai

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PROFESSIONAL AND RESEARCH EXPERIENCES

Dec 2016 - present Group Leader of Computational Biomodelling Laboratory for
Agricultural Science and Technology (CBLAST), Faculty of
Science, Kasetsart University, Bangkok, Thailand

Apr 2015 - present Associate Professor, Department of Physics,
Faculty of Science, Kasetsart University, Bangkok,
Thailand

Apr 2014 – Sep 2017 Deputy Head of the Department of Physics,
Faculty of Science, Kasetsart University, Bangkok, Thailand

Oct 2013 - present Chairman of the M.Sc. Program in Physics, Department of
Physics, Faculty of Science, Kasetsart University, Bangkok,
Thailand

Apr 2012 – Apr 2015 Assistant Professor, Department of Physics,
Faculty of Science, Kasetsart University, Bangkok,
Thailand

Feb 2010 - Apr 2012 Lecturer, Department of Physics, Faculty of Science,
Kasetsart University, Bangkok, Thailand

- Nov 3-14, 2009 Visiting Dr. Luca Monticelli, INSERM, DSIMB, Paris, France
- Oct-Nov 2009 Visiting Dr. Emppu Salonen, Computational Soft Matter Research Group, Department of Applied Physics, Helsinki University of Technology, Espoo, Finland
- Apr 7-8, 2008 Gromacs Spring 2008 workshop “Advanced Molecular Simulation Methods”, Clark center room S362, Stanford University, Palo Alto, CA, USA
- Jan 2008 - 2010 Postdoctoral fellow, Department of Applied Mathematics, The University of Western Ontario, London, On, Canada
- Advisor:** Prof. Mikko Karttunen
- Apr-Dec 2007 Postdoctoral fellow, Department of Physics, Faculty of Science, Mahidol University, Bangkok, Thailand
- Advisor:** Assoc. Prof. Wannapong Triampo
Prof. Youngwimon Lenbury
- Sep 2006 - 2007 Student member of the Biophysical Society
- Mar-Dec 2006 Visiting at Biocomputing group, Department of Biological Sciences, University of Calgary, AB, Canada
- Advisor:** Prof. D. Peter Tieleman
Dr. Luca Monticelli

JOURNAL REVIEWER: Small, Journal of Microfluidics and Nanofluidics, Biochimica et Biophysica Acta (BBA), Journal of American Chemical Society (JACS), Protoplasma, Journal of Biological Physics, PLOS ONE, Journal of Physical Chemistry B, Journal of Physical Chemistry, Journal of Chemical Information and Modeling, Physical Chemistry Chemical Physics, Colloids and Surfaces B: Biointerfaces

EDUCATIONS

- Jun 2003-Apr 2007 Ph.D. (Physics), Mahidol University, Thailand with GPA 4.00
- Thesis:** “Effects of electromagnetic fields on biological system: Leptospira”
- Advisor:** Prof. I Ming Tang, Ph.D.
Assoc. Prof. Wannapong Triampo, Ph.D.
Assoc. Prof. Galayanee DOUNGHAWEE, M.Sc.

- Jun 1999-Mar 2003 B.Sc. with 1st class honored (Physics), Mahidol University,

Bangkok, Thailand with GPA 3.61

Senior project: “The Non-equilibrium aspects of metals: an exact calculation on a small system”

Advisor: Assoc. Prof. Wannapong Triampo, Ph.D.

Jun 1996-Mar 1999 High School Phichairatanakarn School, Ranong, Thailand

RESEARCH GRANTS

- 2018-2020 Research and Development Grant (Grant No. RDG6150125) from Thailand Research Fund (TRF) and Asia Medical and Agricultural Laboratory and Research Center (AMARC)
Project title: Production of Cordyceps ultrafine powder in a pilot scale
Position: Principal Investigator (PI)
- 2018-2021 TRF Research Career Development Grant (Grant No. RSA6180021) from Thailand Research Fund (TRF) and Kasetsart University
Project title: Design and fabrication of Cordyceps products loaded in lipid nanocarriers
Position: Principal Investigator (PI)
- 2018-2019 Research project supported by Kasetsart University Research and Development Institute (KURDI)
Project title: Interactions of phthalate and plastic/biological membrane: The new useful knowledge for safety plastic
Position: Principal Investigator (PI)
- 2017-2020 Research project supported by Thailand Center of Excellence in Physics (ThEP)
Project title: Biophysics of Molecular Recognition and Transportation for Innovative Medicine
Position: Principal Investigator (PI)
- 2017-2019 Research project supported by Thailand Research Fund (TRF)
Project title: Computational modelling of electrical and optical properties in stretched nanowires composited natural rubber
Position: Investigator
- 2017-2018 Research project supported by National Research Council of Thailand (NRCT)
Project title: Enhancement of Cordyceps nano-powder and cordycepin production from *Cordyceps militaris* for pharmaceutical applications
Position: Principal Investigator (PI)
- 2017-2018 Research project supported by Kasetsart University Research and Development Institute (KURDI)
Project title: Improvement of Mechanical Properties for Natural Rubber by Adding Carbon Nanoparticles

Position: Principal Investigator (PI)

- 2016-2018 Research project supported by Kasetsart University Research and Development Institute (KURDI)
Project title: Research and Development of Fundamental Knowledge for Masterbatch Processing From Fresh Latex: Computational Simulations and Experiments
Position: Investigator
- 2016 - 2017 Research project supported by Kasetsart University Research and Development Institute (KURDI)
Project title: Anticancer drug delivery by cyclodextrins inclusion complex
Position: Principal Investigator (PI)
- 2015 - 2016 Research Fund Group(RFG) from Faculty of Science and Kasetsart University, grant no. RFG1-8
Project title: Single-nucleotide base identification by using Cyclodextrin
Position: Principal Investigator (PI)
- 2015 - 2016 Research project supported by Kasetsart University Research and Development Institute (KURDI)
Project title: Permeation mechanism of beta cyclodextrins and its derivatives into biological membrane
Position: Principal Investigator (PI)
- 2014 - 2015 The Ratchadapisek Somphot Endowment fund, Chulalongkorn University
Project title: Structure stability and drug release process of cyclodextrins
Position: Investigator
- 2014 - 2015 ARC's research fund from Asia research center (ARC), Chulalongkorn University
Project title: Releasing mechanism of flavonoids in cyclodextrin-based drug delivery system
Position: Principal Investigator (PI)
- 2012- 2014 Science Research Fund (ScRF) from Faculty of Science, Kasetsart University
Project title: The interaction of alpha-tocopherol on lipid bilayer
Position: Principal Investigator (PI)
- 2012-2014 Research project supported by Kasetsart University Research and Development Institute (KURDI)
Project title: Interaction of carbon nanoparticle on lipid monolayer
Position: Principal Investigator (PI)

- 2011-2013 TRF-CHE Research Grant for New Scholar (MRG5480259) from Thailand Research Fund(TRF), The Commission on Higher Education (CHE), Ministry of Education and Kasetsart University
Project title: The permeation of water and small molecules through nanopore
Position: Principal Investigator (PI)
- 2010-2012 Preproposal Research Fund (PRF) from Faculty of Science, Kasetsart University
Position: Principal Investigator (PI)

HONORS AND AWARDS

- 2017 Ku Research Star from Kasetsart University
- 2016 Outstanding Publication Awards from Faculty of Science, Kasetsart University
- 2013 Outstanding Publication Awards from Faculty of Science, Kasetsart University
- 2009 Travel Award from 1st Nano Today conference
- 2008 Graduate Thesis Publication Awards from Faculty of Graduate Studies, Mahidol University
- 2007 Awards for Graduates with Distinction from Faculty of Graduate Studies (Dean's List from the Faculty of Graduate Studies), Mahidol University
- 2007 Scholarships for Doctoral Students and Graduate Program Staff for a Presentation Abroad from Faculty of Graduate Studies, Mahidol University
- 2007 International Travel Grant from Biophysical Society
- 2003 Outstanding Physics Student with the Highest GPA Awards year 2002, from Professor Taeb Nilanithi Foundation
- 2003 Outstanding Student Researcher Awards, from Faculty of Science, Mahidol University
- 2003 Outstanding Physics Student with the Highest GPA throughout Academic Year 2002 Awards, from Faculty of Science, Mahidol University

STUDY SCHOLARSHIPS

- 2003-2007 Ph.D. (Physics) Scholarship from the Royal Golden Jubilee Ph.D. Program (RGJ)

1999-2003 B.Sc. (Physics) Scholarship from Srirangtong, Mahidol University

PUBLICATIONS, BOOKS, PATENTS, AND PETTY PATENTS

Publications (>30 publications, 15 H-index (Google Scholar), >1000 citations (Google Scholar))

Submitted & Accepted

1. Mesayamas Kongsema*, Sudtirak Wongkhieo, Mattaka Khongkow, Eric W.F. Lam, Phansiri Boonnoy, Wanwipa Vongsangnak and **Jirasak Wong-ekkabut*** *Molecular mechanism of Thiostrepton on FOXM1 Inhibition in Breast Cancer Cells: in silico and in vitro studies*, Submitted
2. Pornkamon Nalakarna, Phansiri Boonnoy, Mikko Karttunen and **Jirasak Wong-ekkabut***, *Dependence of fullerene aggregation on lipid saturation due to a balance between entropy and enthalpy*, Accepted for Scientific Reports

2018

3. Phansiri Boonnoy, Mikko Karttunen*, and **Jirasak Wong-ekkabut***, *Does alpha-tocopherol flip-flop help to protect membranes against oxidation?*, The Journal of Physical Chemistry B, Vol. 122(45), October 2018, pp. 10362-10370
4. **Jirasak Wong-ekkabut**, Wanwipa Vongsangnak, Wasinee Khuntawee, *Production Process of Cordyceps Powder for Enhanced Cordycepin Release*, Submission ID 1803002126
5. **Jirasak Wong-ekkabut**, Wanwipa Vongsangnak, Wasinee Khuntawee, Teerapong Yata, and Katawut Namdee, *Microencapsulation of Cordyceps Extract and Production Process*, Submission ID 1703002400

2017

6. Jiramate Kitjanon, Wasinee Khuntawee, Thana Sutthibutpong, Phansiri Boonnoy, Saree Phongphanphanee, and **Jirasak Wong-ekkabut***, *Transferability of Polymer Chain Properties between Coarse-Grained and Atomistic Models of Natural Rubber Molecule Validated by Molecular Dynamics Simulations*, Siam Physics Congress 2017 (SPC2017), IOP Conf. Series: Journal of Physics: Conf. Series, Vol. 901, 2017, 012096
7. Wasinee Khuntawee, Mikko Karttunen, and **Jirasak Wong-ekkabut***, *Molecular Dynamics Study of Conformations of Beta-Cyclodextrin and its Eight Derivatives in Four Different Solvents*, Physical Chemistry Chemical Physics, Vol. 19(35), September 2017, pp. 24219 - 24229
8. Phansiri Boonnoy, Mikko Karttunen, and **Jirasak Wong-ekkabut***, *Alpha-tocopherol inhibits pore formation in oxidized bilayers*, Physical Chemistry Chemical Physics, Vol. 19(8), February 2017, pp. 5699-5704, This article was featured in 2017 PCCP HOT Articles

2016

9. **Jirasak Wong-ekkabut*** and Mikko Karttunen*, The good, the bad and the user in soft matter simulations, *Biochimica et Biophysica Acta (BBA) – Biomembranes*, Vol. 1858(10), October 2016, pp. 2529-2538
10. Nachon Raethong, **Jirasak Wong-ekkabut**, Kobkul Laoteng, Wanwipa Vongsangnak*, Annotation and Functional Assessment of Transporters in *Aspergillus oryzae* Metabolism, *BioMed Research International*, Vol. 2016, 2016, 8124636
11. **Jirasak Wong-ekkabut*** and Mikko Karttunen, *Molecular dynamics simulation of water permeation through Alpha hemolysin channel*, *Journal of Biological Physics*, Vol. 42(1), January 2016, pp. 133-146, <http://dx.doi.org/10.1007/s10867-015-9396-x>

2015

12. Phansiri Boonnoy, Viwan Jarerattanachat, Mikko Karttunen*, and **Jirasak Wong-ekkabut***, *Bilayer deformation, pores & micellation induced by oxidized lipids*, *The Journal of Physical Chemistry Letters*, Vol. 6, November 2015, pp. 4884–4888, <http://dx.doi.org/10.1021/acs.jpcclett.5b02405>
13. Bin Liu, **Jirasak Wong-ekkabut**, Mikko Karttunen, *Molecular dynamics simulation of surfactant monolayers*, "Computational Methods for Complex Liquid-Fluid Interfaces", Rahni, Karbaschi, Miller (Eds.). Taylor & Francis, 2015
14. Wasinee Khuntawee, Peter Wolschann, Thanyada Rungrotmongkol, **Jirasak Wong-ekkabut***, Supot Hannongbua, *Molecular Dynamics Simulations of the Interaction of Beta Cyclodextrin with Lipid Bilayer*, *Journal of Chemical Information and Modelling*, Vol. 55 (9), August 2015, pp. 1894–1902, <http://dx.doi.org/10.1021/acs.jcim.5b00152>
15. Nililla Nisoh, Mikko Karttunen, Luca Monticelli, and **Jirasak Wong-ekkabut***, *Lipid monolayer disruption caused by aggregated carbon nanoparticles*, *RSC Advances*, Vol. 5 (15), January 2015, pp. 11676 – 11685, <http://dx.doi.org/10.1039/C4RA17006G>

2014

16. **Jirasak Wong-ekkabut**, Introduction to Quantum mechanics, KU-press, Bangkok, 180 pages, September 2014

2013

17. Viwan Jarerattanachat, Mikko Karttunen, and **Jirasak Wong-ekkabut***, *Molecular Dynamics Study of Oxidized Lipid Bilayers In NaCl Solution*, *The Journal of Physical Chemistry B*, Vol. 117 (28), July 2013, pp 8490–8501 <http://dx.doi.org/10.1021/jp4040612>
18. Mohsen Pourmousa, **Jirasak Wong-ekkabut**, Michale Patra, and Mikko Karttunen, *Molecular dynamics studies of transportan interacting with a DPPC bilayer* *Journal of Physical Chemistry B*, Vol. 117 (1), 2013, pp. 230–241 <http://dx.doi.org/10.1021/jp310255r>

2012

19. **Jirasak Wong-ekkabut***, and Mikko Karttunen, *Assessment of common simulation protocols for simulations of nanopores, membrane proteins &*

channels, Journal of Chemical Theory and Computation, Vol. 8, Issue 8, August 2012, pp. 2905–2911, <http://dx.doi.org/10.1021/ct3001359>

20. **Jirasak Wong-ekkabut**, Viwan Jarerattanachat, Tunyarat Phasiri and Mikko Karttunen, *The Effects of NaCl on Oxidized Lipid Bilayers*, Biophysical Journal, Vol. 102, No. 3, 2012, pp. 648A, doi: 10.1016/j.bpj.2011.11.3527

2011

21. Elio Cino, **Jirasak Wong-ekkabut**, Mikko Karttunen, and Wing-Yiu Choy, *Molecular Dynamics Simulations Indicate that Prothymosin Alpha and Nrf2 Bind to Keap1 via Preformed Structural Elements and Coupled Folding and Binding*, Plos ONE, Vol. 6, No. 11, November 2011, pp. e27371, <http://dx.doi.org/10.1371/journal.pone.0027371>

2010

22. **Jirasak Wong-ekkabut**, Markus Miettinen, Cristiano L. Dias, Mikko Karttunen, *Static charges cannot drive a continuous flow of water molecules through a carbon nanotube*, Nature Nanotechnology, Vol. 5, September 2010, pp. 555-557, <http://dx.doi.org/10.1038/nnano.2010.152>
23. Cristiano L. Dias, Tapio Ala-Nissila, **Jirasak Wong-ekkabut**, Ilpo Vattulainen, Martin Grant and Mikko Karttunen, *Reply to the Comment by Graziano on “The hydrophobic effect and its role in cold denaturation”*, Cryobiology, Vol. 60, No. 3, 2010, pp. 356-357, doi:10.1016/j.cryobiol.2010.03.006
24. Sudarat Chadsuthi, **Jirasak Wong-ekkabut**, Wannapong Triampo, Galayanee Dounghawee, and Darapond Triampo, *Comparison of the effects of UV-A radiation on *Leptospira interrogans* serovar Bataviae, Canicola, and Pomona*, African Journal of Biotechnology, Vol. 9, No. 21, 2010, pp. 3196-3206
25. Cristiano L. Dias, Tapio Ala-Nissila, **Jirasak Wong-ekkabut**, Ilpo Vattulainen, Martin Grant and Mikko Karttunen, *The hydrophobic effect and its role in cold denaturation*, Cryobiology, Vol. 60, No. 1, 2010, pp. 91-99, doi: 10.1016/j.cryobiol.2009.07.005

2009

26. **Jirasak Wong-ekkabut**, Sudarat Chadsuthi, Wannapong Triampo, Galayanee Dounghawee, Darapond Triampo, and Chartchai Krittanai, *Leptospirosis research, Response of pathogenic spirochete to ultraviolet-A irradiation*, African Journal of Biotechnology, Vol. 8, No. 4, 2009, pp. 3341-3352.

2008

27. **Jirasak Wong-ekkabut**, Svetlana Baoukina, Wannapong Triampo, I-Ming Tang, D. Peter Tieleman, and Luca Monticelli, *Computer simulation study of fullerene translocation through lipid membranes*, Nature Nanotechnology, Vol. 2, 2008,



pp. 363-368, doi:10.1038/nnano.2008.130, Cover story on the June 2008 issue.

2007

28. **Jirasak Wong-ekkabut**, Zhitao Xu, Wannapong Triampo, I-Ming Tang, D. Peter Tieleman, and Luca Monticelli, *Effect of lipid peroxidation on the properties of lipid bilayers: a molecular dynamics study*, Biophysical Journal, Vol. 93, No. 12, 2007, pp 4225-4236, doi:10.1529/biophysj.107.112565.
29. Luca Monticelli, **Jirasak Wong-Ekkabut**, Svetlana Baoukina, D. Peter Tieleman, *Interactions between carbon nanoparticles and lipid bilayers: insights from MD simulations with a coarse-grained model*, Biophysical Journal **Suppl. S**, 2007, pp. 539A.
30. **Jirasak Wong-ekkabut**, Luca Monticelli, Zhitao Xu, Svetlana Baoukina, Wannapong Triampo, I Ming Tang, and Peter Tieleman, *Effect of peroxidation on the properties of a palmitoyl-2-linoleyl-sn-glycero-3-phosphatidylcholine bilayer*, Biophysical Journal **Suppl. S**, 2007, pp. 427A.
31. W. Triampo, D. Baowan, I.M. Tang , N. Nuttavut, **J. Wong-ekkabut**, and G. Dounghawee, *A Simple Deterministic Model for the Spread of Leptospirosis in Thailand*, International Journal of Biomedical Sciences, Vol. 2, No.1 2007, pp. 22-26

2006

32. A. Boondirek, J. Poulter, W. Triampo, **J. Wong-ekkabut**, I. M. Tang, and P. Picha, *A Stochastic Model of Cancer Growth with Immune Response*, Journal of the Korean Physical Society, Vol.49, No.4 October 2006, pp.1652-1666.

2004

33. **J. Wong-ekkabut**, W. Triampo, I-Ming Tang, D. Triampo D. Baowan, and Y. Lenbury, *Vacancy-Mediated Disorder Process in Binary Alloys at Finite Temperatures: Monte Carlo Simulations*, Journal of the Korean Physical Society, Vol.45, No.2 August 2004, pp.310-317.
34. Wannapong Triampo, Galayanee Dounghawee, Darapond Triampo, **Jirasak Wong-ekkabut**, and I-Ming Tang, *Effects of Static Magnetic Field on Growth of Leptospire, Leptospira interrogans serovar canicola: Immunoreactivity and Cell Division* , Journal of Bioscience and Bioengineering, Vol. 98, No.3 , 2004 pp.182-186 .

2003

35. Wannapong Triampo, I-Ming Tang, and **Jirasak Wong-ekkabut**, *Explicit Calculations on Small Non-equilibrium Driven Lattice Gas Models*, Journal of the Korean Physical Society, Vol.43, No. 2 August 2003, pp.207-214.

INTERNATIONAL SEMINARS, CONFERENCES, AND WORKSHOPS

1. Nililla Nisoh, Mikko Karttunen, Luca Monticelli, and **Jirasak Wong-ekkabut***, *The disruption of lipid monolayer due to carbon nanoparticles*, The 10th European Biophysics Congress (EBSA 2015), Dresden, Germany, July 18-22, 2015
2. **Jirasak Wong-ekkabut(Invited speaker)**, *The Aggregation of Carbon Nanoparticles in Lipid Monolayer*, International Meeting on Applications of Statistical Mechanics of Molecular Liquid on Soft Matter, Bangkok, Thailand, September 14-17, 2014
3. Phansiri Boonnoy, and **Jirasak Wong-ekkabut**, Viwan Jarerattanachart, *The Water Pore Formation in the Oxidized Lipid Bilayer*, International Meeting on Applications of Statistical Mechanics of Molecular Liquid on Soft Matter, Bangkok, Thailand, September 14-17, 2014
4. Wasinee Khuntawee, Thanyada Rungrotmongkol, Peter Wolschann, **Jirasak Wong-ekkabut**, and Supot Hanongbua, *How does the beta cyclodextrin interact with bilayer membrane?*, International Meeting on Applications of Statistical Mechanics of Molecular Liquid on Soft Matter, Bangkok, Thailand, September 14-17, 2014
5. Nililla Nisoh, and **Jirasak Wong-ekkabut**, *The Behavior of Carbon Nanoparticles in Lipid Monolayer*, International Meeting on Applications of Statistical Mechanics of Molecular Liquid on Soft Matter, Bangkok, Thailand, September 14-17, 2014
6. **Jirasak Wong-ekkabut**, *The water pore formation in the oxidized lipid bilayer*, 2014 International Biophysics Congress, Brisbane, Australia, 3-7 August 2014
7. Wasinee Khuntawee, Thanyada Rungrotmongkol, Peter Wolschann, **Jirasak Wong-ekkabut**, and Supot Hanongbua, *The permeation behavior of beta cyclodextrin through lipid bilayer*, 2014 International Biophysics Congress, Brisbane, Australia, 3-7 August 2014
8. **Jirasak Wong-ekkabut**, Viwan Jarerattanachart, Tunyarat Phasiri and Mikko Karttunen *The Effects of NaCl on Oxidized Lipid Bilayers*, 56th annual Biophysical Meeting, San Diego convention center, San Diego, California, USA, 25-29 February 2012
9. Amir Mohsen Pourmousa Abkenar, **Jirasak Wong-ekkabut**, Michael Patra, and Mikko Karttunen, *Cell Penetration by Transportan*, APS March Meeting 2010, Volume 55, Number 2, Portland, Oregon, USA, 15–19 March 2010
10. **Jirasak Wong-ekkabut**, *Effects of lipid peroxidation on the properties of biological membrane*, Department of Applied Physics, Helsinki University of Technology, Espoo, Finland, 26 October 2009

11. **Jirasak Wong-ekkabut**, *Permeation of water molecules through nanopore*, Computational Soft Matter Research Group, Department of Applied Physics, Helsinki University of Technology, Espoo, Finland, 15 October 2009
12. **Jirasak Wong-ekkabut** and Mikko Karttunen, Water permeation through alpha hemolysin nanopore, 1st Nano Today conference, Biopolis, Singapore, 2-5 August 2009
13. **Jirasak Wong-ekkabut** and Mikko Karttunen, Water permeation through alpha hemolysin protein nanopore, SHARCNET Research Day 2009: HPC Innovation for Research, Arts Lecture Hall Complex, University of Waterloo, Waterloo, Ontario, Canada, 21 May 2009
14. **Jirasak Wong-ekkabut**, Luca Monticelli, Zhitao Xu, Svetlana Baoukina, Wannapong Triampo, I Ming Tang, and Peter Tieleman. Effect of peroxidation on the properties of a palmitoyl-2-linoleyl-sn-glycero-3-phosphatidylcholine bilayer, 51st annual Biophysical Meeting, Baltimore convention center, Baltimore, Maryland, USA, 3-7 March 2007
15. Luca Monticelli, **Jirasak Wong-Ekkabut**, Svetlana Baoukina, D. Peter Tieleman Interactions between carbon nanoparticles and lipid bilayers: insights from MD simulations with a coarse-grained model, 51st annual Biophysical Meeting, Baltimore convention center, Baltimore, Maryland USA, 3-7 March 2007
16. **J. Wong-ekkabut**, W. Triampo, S. Chadsuthi, G. Doungchawee, C. Krittanai, and I. M. Tang, *Response of pathogenic Leptospira interrogans serovar Canicola to UVA Irradiation*, International Leptospirosis Society 4th Scientific Meeting (ILS2005), Central Duangtawan Hotel, Chiang Mai, Thailand, 14-16 November 2005
17. W. Triampo, D. Arayasantiparb and **J. Wong-ekkabut**, *Monte Carlo Studies of Non-equilibrium Vacancy Mediated Dynamics in Binary Alloys*, Annual National Computational Science and Engineering Symposium 2002(ANSCSE6), Walailak University, Nakonsritammarat, Thailand, 3-5 April 2002

DOMESTICAL REVIEWS, SEMINARS, CONFERENCES, AND WORKSHOPS

1. **Jirasak Wong-ekkabut(Invited speaker)**, *Coarse-grained simulations of Carbon nanoparticles in Lipid monolayer*, the Siam Physics Congress 2014 (SPC2014), Rajamangala University of Technology Isan, Nakhon Ratchasima, Thailand, March 26-29, 2014
2. **Jirasak Wong-ekkabut**, *Effects of Carbon nanoparticles on Lung surfactant*, The International Kasetsart University Science and Technology Annual Research Symposium(I-KUSTARS), Faculty of Science, Kasetsart University, Bangkok, Thailand, March 27-28, 2014

3. จิรศักดิ์ วงศ์เอกบุตร(**Jirasak Wong-ekkabut**), บทความเรื่อง “เปิดประตูใจเข้าสู่เซลล์”, วารสารฟิสิกส์ไทย(Thai Journal of Physics), ปีที่ 28, ฉบับที่ 4, ธันวาคม 2554- กุมภาพันธ์ 2555, หน้า 11-17
4. **Jirasak Wong-ekkabut (Instructor)**, *The workshop on “Introduction to Molecular Medeling: Gromacs Package”*, Annual National Computational Science and Engineering Symposium 20012(ANSCSE16), Chiang Mai University, Chiang Mai, Thailand, 23 May 2012, <http://www.e-science.in.th/infra/index.php/20120306128/gro>
5. **Jirasak Wong-ekkabut**, *The molecular dynamics simulation of biomolecular system*, Department of Genetics, Faculty of Science, Kasetsart University, Bangkok, Thailand, 28 March 2012
6. **Jirasak Wong-ekkabut**, *The molecular dynamics simulation of biomolecular system*, Department of Physical Chemistry, Faculty of Science, Mahidol University, Bangkok, Thailand, 26 March 2012
7. **Jirasak Wong-ekkabut**, *Study and research experience in physics*, Physics seminar course, Department of Physics, Faculty of science, Mahidol University, Bangkok,Thailand, 12 June 2007
8. S. Chadsuthi,W. Triampo, G. Dounghawee, **J. Wong-ekkabut**, D. Triampo, and I. M. Tang, *Effect of TiO₂ Nanoparticles on Pathogenic Spirochetes, Leptospira Interrogans*, Siam Physics Congress, Nakorn Pathom, Thailand, 22 –24 March 2007
9. S. Chadsuthi, W. Triampo, G. Dounghawee, and **J. Wong-ekkabut**, *Antibacterial effects of TiO₂ Nanoparticles Combine with UVA on Letospira Interrogans Serovar Canicola*. 32nd Congress on Science and Technology of Thailand(STT.32) Venue: Queen Sirikit National Convention Center, Bangkok, Thailand, 10-12 October, 2006
10. H. Pitakjakpipop, W. Triampo, C. Kritanai, N. Nuttavut, **J. Wong-ekkabut**, I-Ming Tang, and G. Dounghawee, *Estimation the number of Leptospires in liquid media by using turbidity via spectrophotometer*, The Second National Conference on Optics and Applications(NCOA-2), Miracle Grand Convention Hotel, Bangkok, Thailand, 4 February 2005
11. **J. Wong-ekkabut**, W. Triampo, I-Ming Tang, D. Triampo D. Baowan, and Y. Lenbury, *Vacancy-Mediated Disorderng Process in Binary Alloys at Finite Temperatures: Monte Carlo Simulations*, RGJ-Ph.D. CongressVI, Jomtien Palm Beach Hotel and Resort, Pattaya ,Chonbury, Thailand, 28-30 April 2005
12. **Jirasak Wong-ekkabut**, Wannapong Triampo, I-Ming Tang, *Temperature dependent on the slope the disordering parameter of vacancy-mediated disordering processes in binary alloy systems at finite temperature : Monte*

Carlo simulations, 29th Congress on Science and Technology of Thailand, Golden Jubilee Convention Hall, Khon Kaen University, Khon Kaen, Thailand, 20-22 October 2003

13. **J. Wong-ekkabut**, *Modeling of Binary Alloy in Non-Equilibrium System*, 4th Science Project Exhibition, Faculty of Science, Mahidol University, 13 March 2003
14. **J. Wong-ekkabut**, W. Triampo and D. Triampo, *Explicit calculations on small non-equilibrium driven lattice gas model*, 28th Congress on Science and Technology of Thailand. Bangkok, Thailand, p 197, 24-26 October 2002
15. **J. Wong-ekkabut**, W. Triampo and D. Arayasantiparb, *The Non-equilibrium aspects of Metals: An exact Calculation on a small System*, The Second Thailand Materials Science and Technology Conference: Materials Science and Technology for a Sustainable Development of Thailand, 6-7 August 2002
16. **J. Wong-ekkabut**, *The Statistical Mechanics of Driven Diffusive Systems*, 3rd Science Project Exhibition, Faculty of Science, Mahidol University, 14 March 2002