



[KANG ENG SIEW]
[Assistant Professor]
[Department of Electrical and Electronic Engineering
/Faculty of Engineering and Information Technology (FEIT)]
[eskang@sc.edu.my]



1. Academic Qualification

No.	QUALIFICATION	FIELD OF SPECILIZATION	NAME OF AWARDING INSITUTION & COUNTRY	START DATE – END DATE
1.	B.E.E	Electrical & Electronic	Universiti Teknologi Malaysia	2004-2008
2.	PhD	Advanced Nanoelectronics	Universiti Teknologi Malaysia	2008-2013

2. PREVIOUS EMPLOYMENT RECORD

No.	START DATE – END DATE	POSITION	JOB NATURE	EMPLOYER / COMPANY
1.	April 2013- current	Lecturer	Academic	Southern University College
2.	July 2013- March 2014	Post-Doctoral	Research	Universiti Teknologi Malaysia
3.	June 2009- June 2011	Teaching Assistant	Academic	Universiti Teknologi Malaysia
4.	May 2007- June 2007	Trainee Engineer	Industrial	Intel Microelectronics



3. PROFESSIONAL QUALIFICATION / MEMBERSHIP (NATIONAL / INTERNATIONAL)

No.	TYPE OF QUALIFICATIONS / MEMBERSHIP	GOVERNED BY WHICH BODY / COMPANY / ASSOCIATION / OTHERS	AWARDED YEAR / MEMBERSHIP DURATION
1.	Chartered Engineer	The Institution of Engineering and Technology	2017
2.	The Institution of Engineering and Technology (IET)	The Institution of Engineering and Technology	2016
3.	Microsoft Certified Educator (MCT)	Microsoft	2016
4.	Graduate Engineer of BEM	Board of Engineers Malaysia	2008

4. RECOGNITION AWARD (NATIONAL / INTERNATIONAL)

No.	TYPE OF AWARD RECEIVED	RECEIVED FROM WHICH BODY / COMPANY / ASSOCIATION / OTHERS	RECEIVED YEAR
1.	Outstanding Research Award	Southern University College	2015

5. CONSULTANCY SERVICES / COMMUNITY SERVICES

No.	ORGANIZATION / EVENT / PROJECT	DATE / DURATION	VENUE / COMPANY	ROLE / POSITION
1.				
2.				



6. CONFERENCES AND TRAININGS

No.	TITLE OF THE CONFERENCES / TRAINING	DATE	TRAINING VENUE	ORGANIZE BY SPEAKER / TRAINER
1.	Training Postgraduate Supervision Good Practices - "Mentoring vs Supervision"	2 nd August 2018	Southern University College	Dr. Teh Geok Bee
2.	Training Turnitin workshop	16 th July 2018	Southern University College	Mr. Mazlan
3.	Training Complex Engineering Problem Solving and Complex Engineering Activities Workshop	10 th April 2018	Southern University College	Ir. Liew Chia Pao.
4.	Training One Day Workshop on Gap Analysis of the Engineering Accreditation Council Manual	3 rd April 2018	Wisma IEM , Petaling Jaya	Ir. Dr. Siti Hawa Hamzah & Ir. Liew Chia Pao.
5.	Training The Essential of Fire Awareness	29 th Dec 2017	Southern University College	
6.	Training Accreditation Criteria in 2012 EAC Manual Workshop	20 th -21 st July 2017	Southern University College	
7.	Training Seminar on Learning Outcomes (Rubrics and Lesson Plan)	17 th May 2017	Southern University College	
8.	Training Teaching Workshop "Perspectives in Learning" and "Instructional Method"	29 th -30 th March, 2017	Southern University College	
9.	Conduct Workshop Photo Resistor and LEDs	26 th August 2016	Southern University College	
10.	Conduct Workshop Pulse Sensor Workshop	27 th August 2016	Southern University College	
11.	Conferences 2 nd International Workshop on Big Data Analytics (IWBD2016)	23 th -24 th August 2016	Jen Hotel, Puteri Harbour	



12.	Training Microsoft Certified Educator (MCE)	6 th -7 th April 2016	Southern University College	
13.	Training Arduino Workshop	30 th Dec 2015	Southern University College	
14.	Conduct Workshop Pulse Rate Sensor & PCB Fabrication	27 th -28 th August 2015	Southern University College	
15.	Training Programmable Logic Fundamentals	21 st August 2015	Southern University College	
16.	Training Research Methodology Workshop	June 2015	Southern University College	
17.	Conduct Workshop Sharing Our Passions: Teaching and Research Workshop	10 th Jun 2015	Southern University College	
18.	Training Workshop on Quality Education and Introduction to Problem Based Learning (PBL)	February 2015	Southern University College	
19.	Training Workshop on Writing Journal Papers	2011	Universiti Teknologi Malaysia	
20.	Training Training Course on Mathematica V7	2010	Universiti Teknologi Malaysia	
21.	Training Workshop on Nanosciene and Nanotechnology: A Gentle Introduction to Next Big Idea	2010	Universiti Teknologi Malaysia	
22.	Conferences 2nd International Conference and Workshops on Basic and Applied Sciences & Regional Annual Fundamental Science Seminar	2 nd - 4 th June 2009	Johor Bahru,	
23.	Conferences Regional Symposium on Microelectronics,	25 th -29 th May 2009	Kota Bharu	



7. RESEARCH AND PUBLICATION

RESEARCH / PUBLICATION / JOURNALS / BOOKS / OTHER

Book Chapter:

1. E. S. Kang and R. Ismail (2012). *Advanced Nanoelectronics: Quantum Mechanical Effects in Nanometer Strained Si/Si_{1-x}Ge_x MOSFETs*, Published in December 03, 2012 by CRC Press / Taylor and Francis Group. ISBN 9781439856802
2. Chia Kim Seng, Kang Eng Siew, Eng Pei Chee and Hui Seng Keong, Build A Line Follower Robot, Southern University Press, 2014

Journals

1. **E.S. Kang** and R. Ismail. (2014). Unified Drain Current Model of Armchair Graphene Nanoribbons with Uniaxial Strain and Quantum Effect, *Journal of Nanomaterials*, Vol. 2014, 219719, 2014. (IF= 1.611)
2. **E.S. Kang**, Fatimah Abd. Hamid, R. Ismail. (2014). Future of Nanoscale Strained Si/SiGe Metal Oxide Semiconductor Field Effect Transistor for Performance Metric Evaluation: A Review. *Journal of Nanoelectronics and Optoelectronics*, Vol. 9, 317-326, 2014. (IF= 0.37)
3. **E. S. Kang**, S. Anwar and R. Ismail. (2013). Threshold Voltage Variation of Nanoscale Strained Si / Si_{1-x}Ge_x MOSFETs in the Presence of Punch Through Effect. *Journal of Computational and Theoretical Nanoscience*, Vol. 10, No. 10, pp.2366-2370, October 2013. (IF=0.673)
4. **E. S. Kang**, Sohail Anwar and Razali Ismail. (2013). Energy Quantization on the Current-Voltage Characteristic of Nanoscale Strained Si / Si_{1-x}Ge_x MOSFETs. *International Journal of Modern Physic B*, Vol.27, No. 17, July 2013. (IF=0.358)
5. **E. S. Kang**, S. Anwar and R. Ismail. (2013). Impact of Germanium in Strained Si/Relaxed SiGe on the Carrier Performance in NonDegenerate and Degenerate Regimes. *Journal of Semiconductor*, Vol. 34, No. 6, 062001 June 2013 (Listed Scopus).
6. **E. S. Kang**, S. Anwar and R. Ismail. (2012). Quantum Mechanical Effect on the Threshold Voltage of Nanoscale Dual Channel Strained Si/Strained Si_{1-y}Ge_y/relaxed Si_{1-x}Ge_x PMOSFETs. *Journal of Computational and Theoretical Nanoscience*, Vo. 10, No. 5, pp.1231-1235, May 2013. (IF=0.673)
7. **E. S. Kang**, S. Anwar and R. Ismail. (2012). Quantum Confinement on the Current-Voltage Characteristics of Nanoscale Two-Dimensional MOSFETs. *Jurnal Teknologi*, 2013. (Listed Scopus)
8. **E. S. Kang**, F. A. Hamid and R. Ismail. (2012). Einstein Relation of Two- Dimensional Strained Si/Si_{1-x}Ge_x PMOSFETs in Nondegenerate Regime and Degenerate Regime. *International Journal of Nano Devices*, Vol.1, No. 1, May 2012, pp.12-18.
9. **E. S. Kang**, W. H. Yau, S. Anwar and R. Ismail. (2012). Two-Dimensional Analytical Threshold Voltage Model of Nanoscale Strained Si/Si_{1-x} Ge_x MOSFETs including Quantum Mechanical Effects. *Journal of Computational and Theoretical Nanoscience*, Vol. 9. No. 3, pp. 441-447, March 2012. (IF=0.673)



Conferences:

1. **E. S. Kang**, Kiani M. J, Hedayat S. N. Ahmadi M. T, Hamzah M. A and Razali Ismail.(2012). Analytical Study of the Intrinsic Velocity of Nanoscale Strained Silicon MOSFETs, Including the Effects of Germanium. *Isfahan's Electrical Engineering National Conference*.
2. Y. C. Thien, **E. S. Kang** and Razali Ismail. (2012). Simulation of Nanoscale Dual-channel Strained Si/Si_{1-x}Ge_x Silicon PMOSFET. *10th IEEE International Conference on Semiconductor Electronics*.
3. **E. S. Kang**, Mohammad T. Ahmadi, Wei Hong Yau and Razali Ismail. (2009). Current Characteristic for High Performance Strained Silicon NMOSFETs. *Proceeding of 2009 Regional Symposium on Microelectronics*.
4. **E. S. Kang**, Mohammad T.Ahmadi, Munawar A Riyadi and Razali Ismail. (2009). Numerical Study of Diffusion Current Characteristic for Non-Degenerate N-type Strained Silicon MOSFETs. *Proceedings of International Conference on Basic and Applied Science and Regional Annual Fundamental Science Seminar*.
5. Munawar. A Riyadi, Mohammad T. Ahmadi and Jatmiko E. Suseno, **E. S. Kang**, Ismail Saad, Razali Ismail and V. K. Arora. (2009). *Physics-Based Simulation of Carrier Velocity in 2-Dimensional P-type MOSFET*. *Proceedings of 2009 3rd Asia International Conference on Modelling and Simulation, AMS*, pp. 735 -738

8. OTHER ADDITIONAL ADMINISTRATIVE RESPONSIBILITIES

No.	POSITION (APPOINTMENT)	FACULTY / DIVISION / DEPARTMENT	START DATE – END DATE
1.	Head of Department	Department of Electrical & Electronics Engineering	September 2017- December 2018
2.	Director	School of Foundation Studies	January 2018 - September 2017
3.	Head of Department	Foundation in Science School of Foundation Studies	January 2018 - September 2017

9. OTHER RELEVANT INFORMATION

Conducted Workshops:

1. Conducted “Photo Resistor and LEDs” on 26th August 2016
2. Conducted “Pulse Sensor Workshop” on 27th August 2016
3. Conducted “Sharing Our Passions: Teaching and Research Workshop” on 10th Jun 2015
4. Conducted “Pulse rate Sensor & PCB Fabrication” on 27th-28th August 2015