Curriculum Vitae for XMUM Official Website

Name	**Ts. Dr. Kang Chia Chao**
Current Position	Senior Lecturer
Administrative Position	Head of Student Affairs (EEE)
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BIOGRAPHY

Ts. Dr. Kang Chia Chao is currently a senior lecturer at Xiamen University Malaysia. He is a registered Graduate Engineer under Board of Engineering Malaysia (BEM), member of Malaysian Society of Engineering Technology (MySET), member of Malaysia Board of Technologists and senior member of Institute of Electrical and Electronics Engineer (IEEE). He received his Bachelor of Electrical & Electronic Engineering at Northumbria University in Newcastle upon Tyne, Master of Science in Electronic Systems Design Engineering and Doctor of Philosophy in Microwave and System Satellite at Universiti Sains Malaysia. He has several years of industrial working experience in electrical and electronic field of engineering prior joining as academician. Besides that, he is also a professional trainer certified by HRDF Malaysia, involved in First Aid training, Emergency Response Team, Construction Safety, SHASSIC. He is also a certified thermography level (1).

RESEARCH INTERESTS

Renewable Energy, Wireless Communication System, RF and Microwave Devices, Green Technology, Internet of Things (IoT)

EDUCATIONAL BACKGROUND

- PhD (Microwaves and Satellite Systems), Universiti Sains Malaysia (2016)
- MSc (Electronic Systems Design Engineering), Universiti Sains Malaysia (2011)
- BSc (Electrical & Electronic Engineering), Northumbria University upon Tyne (2008)

WORKING EXPERIENCE

- University Kuala Lumpur (MITEC), Senior Lecturer (2017-2020)
- Lincoln University College, Lecturer (2016-2017)
- Stradford International College, Lecturer (2014-2015)
- IQ-Group, Product Engineer (2008-2009)
- Berjaya Sdn Bhd, Sales & Customer Service (2002-2005)

PROFESSIONAL APPOINMENTS/MEMBERSHIP

- Professional Technologists, Malaysian Board of Technologist (MBOT)
- Senior member of Institute of Electrical and Electronics Engineer (IEEE)
- Graduate Engineer, Board of Engineers Malaysia (BEM)
- Institution of Engineering and Technology (IET)
- Malaysian Society for Engineering and Technology (MySET)
- Certified Human Resources Development Fund (HRDF) Trainer
- Certified Lembaga Pembangunan Industri Pembinaan Malaysia (CIDB) Trainer
- Certified Safety and Health Assessment System in Construction (SHASSIC) Assessor Officer
- Certified First Level Thermography

RESEARCH EXPERIENCE / GRANTS

- A New Detent Torque Reduction Approach for Turbine-Based Green Energy Harvesting Systems via Stator Tooth-Rotor Magnet Paired Modifications (FRGS 2021)– Co Researcher
- Investigation of Electromagnetic Power Transfer Efficiency in Batteryless Mouse Using Spiral Resonator (XMUMRF 2020) – Principal Researcher
- Silicon Micro Ring Resonator as Refractive Index Sensor with THz Generation Application (XMUMRF 2020) - Co Researcher
- Effective Optimization of Off-Grid Solar-Wind Hybrid Renewable Energy Harvesting Systems (XMUMRF 2020) -Co Researcher

REPRESENTATIVE PUBLICATIONS

- Raveendra, K., Xiao, H., & Chao, K. C* . 2021. Guest Editorial: Recent Advances in Specific Applications of Communication, Computer Vision, and Networks. Journal of Internet Technology, 22(3), 669-672.
- Chia Chao Kang*, Hu Jiajun, Lin Hongjian, Lifan and Zhang Tianyi. 2021. Improvement Of Home Energy Management System By Using Intelligent Lifting Solar Panels. ASM Science Journal.
- Chia Chao Kang*, Widad Ismail, Chia Yang Kang, Jian Ding Tan, And Mohammad Mahdi Ariannejad. 2021. Development of The Extended Costa Loop Carrier Recovery System with SDR Technology. ASM Science Journal.
- Chia Yang Kang, Hadi Nabipour, Hong Siang Chua, Chia Chao Kang*. 2021.Design of Battery Energy Storage System (BESS) with Fuzzy Control for Pico Hydro. In: International Journal of Electrical and Electronic Engineering & Telecommunications (IJEETC)
- C Kang*, C. C., Angamuthu, D., Tsang, T., & Lu, J. 2020. Guest Editorial: Advanced Algorithms and Techniques for Engineering Applications Such As Sensor Networks, Signal Processing and Network Computing. Journal of Internet Technology, 21(5), 1531-1533
- Chia Chao Kang*. 2020. Development Of Wireless Power Transfer Using Electromagnetic for Mouse Application. In: International Journal of Advanced Trends in Computer Science and Engineering

- Siti Fatimah Jainal, Chia Chao Kang*. 2020. Electromagnetic Interference in the Railway Spot Communication Systems. In: International Journal of Advanced Trends in Computer Science and Engineering
- Chia Chao Kang*, Fatin Ayuni. Chia Yang Kang. 2019. Wireless Power Transfer via Magnetic Resonant Coupling By Using Printed Circular Coil. In: International Journal of Innovative Technology and Exploring Engineering
- Chao, K. C.*, Yang, K. C. 2018. Circular Polarize Antenna Array for Electromagnetic Energy Harvesting. In: International Journal of Engineering and Technology
- Chao, k. C.*, Fatin Ayuni. Yang, K. C. 2018. Development of High Gain Circularly Polarized Antenna Array for RF Renewable Energy. In: International Journal of Engineering and Technology
- Mohd Zul Waqar*, Tunku Muhammad Izzat b. Tunku Baharin, Hanim b. Mohd Yatim, Chia C. Kang., Fatin Ayuni b. 2018. Energy Harvester from Waste Heat using Thermoelectricity. In: Chemical Engineering Transactions
- Chao, K.C.*, Mohd Fadzil Bin, Ali Mahdi Jaafar & Ihsan A. Zubir. 2016. Lumped Element Equivalent Circuit Modelling for RF Energy Harvesting Antenna Array. In: Lecture Note Electrical Engineering (LNEE)
- Chao, K. C.*, Ain, M. F. & Ali Zalzala. 2014. Corporate Feed with Dual Segment Circular Polarized Array Rectenna for Low Power RF Energy Harvesting. Journal of Engineering Science and Technology
- Chao, K.C.*, Mohd Fadzil Bin, Ali Mahdi Jaafar & Ihsan A. Zubir. 2014. Modeling and Simulation Using Circular Spiral Antenna Array for RF Harvesting. IOSR Journal of Electronics and Communication Engineering ISSN 2278-8735
- Chao, K. C.*, Ain, M. F.2014. The Effect of Electromagnetic Coupling Via Planar Spiral Inductor for Wireless Power Transfer. International Journal of Natural Sciences Research, 72-77

REPRESENTATIVE PUBLICATIONS (IN PROCEEDINGS)

- Chao, K. C.*, Ain, M. F. 2018. Lumped Element Equivalent Circuit for Wireless Power Transfer. In: Proc. of the International Conference on Engineering Technologies and Technopreneurship (ICE2T 2017)
- CHAO, K. C.* & AIN, M. F. 2014. Radio Frequency Energy Harvesting by Using Circular Spiral Inductor Antenna Array. In: International Engineering for Sustainability Conference (INESCO 2014)
- Kang, C. C.*, Olokede, S. S., Mahyuddin, N. M. & Ain, M. F. 2014. Radio Frequency Energy Harvesting Using Circular Spiral Inductor Antenna. In: 15th Annual IEEE Wireless and Microwave Technology Conference (WAMICON), 2014
- Kang, C. C* & Ain, M. F. 2014. Corporate-Series Feed Circular Spiral Antenna Array for UHF Applications. In: IEEE Student Conference on Research and Development (SCOReD)
- Kang, C. C*, Ain, M. F. 2014. Effect of Magnetic Resonant Coupling for Wireless Power Transfer Platform. In: 4th EE Postgraduate Colloquium (EEPC)

HONORS/AWARDS

- International Multidisciplinary Innovation Competition 2021 (IMIC) – Silver
- International Multidisciplinary Innovation Competition 2021 (IMIC) - Bronze
- International Invention & Innovative Competition 2018 (InIIC) – Gold
- International Invention & Innovative Competition 2019 (InIIC) – Silver