Kwok Feng, CHONG (PhD.)

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Working Experience:

Professor (Jun 2021 – Present): Universiti Malaysia Pahang (Malaysia)

Director / Chief Strategy Officer (May 2021 – Present): Centre for Corporate and Quality Affairs, Universiti Malaysia Pahang (Malaysia)

Associate Professor (Nov 2016 – May 2021): Universiti Malaysia Pahang (Malaysia)

Deputy Director (Rankings) (Oct 2019 – Apr 2021): Centre for Corporate and Quality Affairs, Universiti Malaysia Pahang (Malaysia)

Deputy Dean (Research & Postgraduate Studies) (Mar 2017 – Oct 2019): Universiti Malaysia Pahang (Malaysia)

Head of Industrial Chemistry Programme (2011-Feb 2017): Universiti Malaysia Pahang (Malaysia)

Senior Lecturer (2010 – Nov 2016): Universiti Malaysia Pahang (Malaysia)

Lecturer (2009 – 2010): Temasek Polytechnic (Singapore)

Engineer (2004 – 2005): Darco Water Technologies Limited (Malaysia)

Industrial Intern (2003): W. R. Grace & Co. (Malaysia)

Visiting Professor (Feb 2017, Feb 2018, Jan 2019, Mar 2020, Feb 2022): Prince of Songkla University, Thailand

Professional Body:

IUPAC Division I – Associate Member

Malaysian Institute of Chemistry (IKM) –Member

American Chemical Society – Member

Education:

PhD. (Chemistry), National University of Singapore (NUS), 2010 (Supervisor: Prof. Dr. Kian Ping Loh)

BSc. (Industrial Chemistry), Universiti Teknologi Malaysia, 2004

Research Interest:

Advanced Material, Renewable Energy, Electrochemistry, Supercapacitors, Biosensors, Corrosion Study

Editorial Experience:

Associate Editor – Applied Nanoscience (Springer)

Publications:

1. W. K. Essa, S. A. Yasin, A. H. Abdullah, M. R. Thalji, I. A. Saeed, M. A. Assiri, K. F. Chong, G. A. M. Ali, Taguchi L25 (5^4) Approach for Methylene Blue Removal by Polyethylene Terephthalate Nanofiber-Multi-Walled Carbon Nanotube Composite, **Water** 2022, 14(8), 1242.
2. M. R. Thalji; G. A. M. Ali; K. F. Chong, History and Progress of Polymers for Energy Applications, **Polymers in Energy Conversion and Storage** 2022, 1-11.
3. H. I. Adil; M. R. Thalji; S. A. Yasin; I. A. Saeed; M. A. Assiri; K. F. Chong; G. A. M. Ali, Metal–organic frameworks (MOFs) based nanofiber architectures for the removal of heavy metal ions, **RSC Advances** 2022, 12(3), 1433.

4. Y. Albarqouni; G. A. M. Ali; S. P. Lee; H. Algarni; K. F. Chong*, Dual-functional single stranded deoxyribonucleic acid for graphene oxide reduction and charge storage enhancement, **Electrochimica Acta** 2021, 399, 139366.
5. V. S. Bhat; T. J. Jayeoye; T. Rujiralai; U. Sirimahachai; K. F. Chong; G. Hegde, Acacia auriculiformis-Derived Bimodal Porous Nanocarbons via Self-Activation for High-Performance Supercapacitors, **Frontiers in Energy Research** 2021, 519.
6. A. Bouafia; S. E. Laouini; A. S. A. Ahmed; A. V. Soldatov; H. Algarni; K. F. Chong; G. A. M. Ali, The Recent Progress on Silver Nanoparticles: Synthesis and Electronic Applications, **Nanomaterials** 2021, 11(9), 2318.
7. G. A. M. Ali; S. Supriya; K. F. Chong; E. R. Shaaban; H. Algarni; T. Maiyalagan; G. Hegde. Superior supercapacitance behavior of oxygen self-doped carbon nanospheres: a conversion of Allium cepa peel to energy storage system, **Biomass Conversion and Biorefinery** 2021, 11, 1311.
8. S. Supriya; V. S. Bhat; T. J. Jayeoye;, T. Rujiralai,; K. F. Chong; G. Hegde, An Investigation On Temperature-Dependant Surface Properties Of Porous Carbon Nanoparticles Derived From Biomass, **Journal of Nanostructure in Chemistry** 2021, 1-17.
9. Y. M. Y. Albarqouni; S. P. Lee; G. A. M. Ali; A. S. Ethiraj; H. Algarni; K. F. Chong*, Facile Synthesis Of Reduced Graphene Oxide Aerogel In Soft Drink As Supercapacitor Electrode, **Journal of Nanostructure in Chemistry** 2021, 1-11.
10. M. H. Mahross; M. A. Taher; M. A. Mostfa; K. F. Chong; G. A. M. Ali, Experimental and Quantum Investigations of Novel Corrosion Inhibitors based Triazene Derivatives for Mild Steel, **Journal of Molecular Structure** 2021, 1242, 130831.
11. M. R. Thalji; G. A. M. Ali; P. Liu; Y. L. Zhong; K. F. Chong*, $W_{18}O_{49}$ nanowires-graphene nanocomposite for asymmetric supercapacitors employing $AlCl_3$ aqueous electrolyte, **Chemical Engineering Journal** 2021, 409, 128216.
12. N. Nordin; I. I. Misnon; K. F. Chong; K. S. Loh; R. Jose, Effect of Solvents Ratio and Polymer Concentration on Electrospun Polybenzimidazole Nanofiber Membranes Fabrication, **Materials Science Forum** 2021, 1025, 299.

13. S. P. Lee; G. A. M. Ali; H. H. Hegazy; H. N. Lim; K. F. Chong*, Optimizing Reduced Graphene Oxide Aerogel for a Supercapacitor, **Energy & Fuels** 2021, 35, 4559.
14. E. A. A. Aboelazm; N. Mohamed; G. A. M. Ali; A. S. H. Makhlouf; K. F. Chong, Recycling of cobalt oxides electrodes from spent lithium-ion batteries by electrochemical method, **Waste Recycling Technologies For Nanomaterials Manufacturing** 2021, 91.
15. G. A. M. Ali; Z. H. Bakr; V. Safarifard; K. F. Chong, Recycled nanomaterials for energy storage (Supercapacitor) applications, **Waste Recycling Technologies For Nanomaterials Manufacturing** 2021, 175.
16. G. A. M. Ali; E. Megiel; P. Cieciórski; M. R. Thalji; J. Romański; H. Algarni; K. F. Chong*, Ferrocene functionalized multi-walled carbon nanotubes as supercapacitor electrodes, **Journal of Molecular Liquids** 2020, 318, 114064.
17. S. Sapari; N. H. A. Razak; S. A. Hasbullah; L. Y. Heng; K. F. Chong; L. L. Tan, A regenerable screen-printed voltammetric Hg (II) ion sensor based on tris-thiourea organic chelating ligand grafted graphene nanomaterial, **Journal of Electroanalytical Chemistry** 2020, 878, 114670.
18. R. Z. A. R. Jamaluddin; L. L. Tan; K. F. Chong; L. Y. Heng, An electrochemical DNA biosensor fabricated from graphene decorated with graphitic nanospheres, **Nanotechnology** 2020, 31, 48.
19. V. S. Bhat; T. J. Jayeoye; T. Rujiralai; U. Sirimahachai; K. F. Chong, G. Hegde, Influence of surface properties on electro ‐ chemical supercapacitors utilizing Callerya atropurpurea pod derived porous nanocarbons: Structure property relationship between porous structures to energy storage devices, **Nano Select** 2020, 1, 226.
20. N.H. A. Bakar; J. Ismail; K. F. Chong*, Corrosion Protection Coatings from Size-Specified Graphene Oxide, **Materials Science Forum** 2020, 981, 29.
21. W. S. Lim; K. F. Chong*, Study on Modified Hummers Method for Partially Oxidized Graphene Oxide Synthesis, **Materials Science Forum** 2020, 981, 23.
22. M. Solehudin; U. Sirimahachai; G. A. M. Ali; K. F. Chong; S. Wongnawa, One-pot synthesis of isotype heterojunction g-C_3N_4-MU photocatalyst for effective tetracycline hydrochloride antibiotic and reactive orange 16 dye removal, **Advanced Powder Technology** 2020, 31, 1891-1902.

23. G. A. M. Ali; A. Barhoum; V. K. Gupta; A. Nada; H. El-Maghrabi; R. Kanthasamy; E. R. Shaaban; H. Algarni; K. F. Chong*, High surface area mesoporous silica for hydrogen sulfide effective removal, **Current Nanoscience** 2020, 15, 226-234.
24. N. B. Thalib; S. N. H. Mustapha; K. F. Chong, R. Mustapha, Tailoring graphene reinforced thermoset and biothermoset composites, **Reviews in Chemical Engineering** 2020, 36, 623-652.
25. A. S. Ethiraj; P. Uttam; K. Varunkumar; K. F. Chong, G. A.M. Ali, Photocatalytic performance of a novel semiconductor nanocatalyst: Copper doped nickel oxide for phenol degradation, **Materials Chemistry and Physics** 2020, 242, 122520.
26. G. A.M. Ali; M. R. Thalji; W. C. Soh; H. Algarni; K. F. Chong*, One-step electrochemical synthesis of MoS2/graphene composite for supercapacitor application, **Journal of Solid State Eletrochemistry** 2020, 24, 25-34.
27. M. R. Thalji; G. A. M. Ali; H. Algarni; K. F. Chong*, Al3+ ion intercalation pseudocapacitance study of W18O49 nanostructure, **Journal of Power Sources** 2019, 438, 227028.
28. A. A. Ghawanmeh; H. M. Al-Bajalan; M. M. Mackeen; F. Q. Alali; K. F. Chong*, Recent developments on (−)-colchicine derivatives: Synthesis and structure-activity relationship, **European Journal of Medicinal Chemistry** 2019, 185, 111788.
29. G. A. M. Ali; S. Supriya; K. F. Chong; E. R. Shaaban; H. Algarni; T. Maiyalagan; G. Hegde, Superior supercapacitance behavior of oxygen self-doped carbon nanospheres: a conversion of Allium cepa peel to energy storage system, **Biomass Conversion and Biorefinery** 2019, 204, 1.
30. N. H. A. Bakar; G. A. M. Ali; J. Ismail; H. Algarni; K. F. Chong*, Size-Dependent Corrosion Behavior of Graphene Oxide Coating, **Progress in Organic Coatings** 2019, 134, 272-280.
31. J. K. Ling; B. Pal; K. F. Chong; L. Schmidt-Mende; J. Bisquert; R. Jose, Photocurrents in Crystal-Amorphous Hybrid Stannous Oxide/Alumina Binary Nanofibers, **Journal of the American Ceramic Society** 2019, 102, 6337-6348.

32. E. Y. L. Teo; G. A. M. Ali; H. Algarni; W. Cheewasedtham; T. Rujiralai; K. F. Chong*, One-Step Production of Pyrene-1-Boronic Acid Functionalized Graphene for Dopamine Detection, **Materials Chemistry and Physics** 2019, 231, 286-291.
33. M. Giahi; D. Pathania; S. Agarwal; G. A. M. Ali; K. F. Chong; V. K. Gupta, Preparation Of Mg-Doped Tio2 Nanoparticles For Photocatalytic Degradation Of Some Organic Pollutants, **Studia Universitatis Babes-Bolyai, Chemia** 2019, 64, 7-18.
34. A. A. Ghawanmeh; G. A. M. Ali; H. Algarni; S. Sarkar; K. F. Chong*, Graphene Oxide-based Hydrogels As A Nanocarrier For Anticancer Drug Delivery, **Nano Research** 2019, 12, 973-990.
35. G. A. M. Ali; O. A. Habeeb; H. Algarni; K. F. Chong*, CaO impregnated highly porous honeycomb activated carbon from agriculture waste: symmetrical supercapacitor study, **Journal of Materials Science** 2019, 54, 683-692.
36. P. E. Marina; G. A. M. Ali; L. M. See; E. Y. L. Teo; E-P. Ng; K. F. Chong*, *In situ* growth of redox–active iron–centered particles on graphene sheets for specific capacitance enhancement, **Arabian Journal of Chemistry** 2019, 12, 3883-3889.
37. G. A. M. Ali; H. Sadegh; M. M. Yusoff; K. F. Chong*, Highly stable symmetric supercapacitor from cysteamine functionalized multi-walled carbon nanotubes operating in a wide potential window, **Materials Today: Proceedings** 2019, 16, 2273.
38. S. P. Lee; G. A. M. Ali; H. Algarni; K. F. Chong*, Flake size-dependent adsorption of graphene oxide aerogel, **Journal of Molecular Liquids** 2019, 277, 175-180.
39. A. S. Azab; G. A. M. Ali; M. A. Abdullah; H. Algarni; K. F. Chong*, Utilization Of Eugenia Caryophyllata Thumb, Piper Nigrum Linn, and Thymus Vulgaris L Extracts On The Fungal-Invaded Limestone Of Some Monumental Buildings In Cairo, Egypt, **Fresenius Environmental Bulletin** 2018, 27(12A), 9213-9221.
40. P. Thongprapai; W. Cheewasedtham; K. F. Chong; T. Rujiralai, Selective magnetic nanographene oxide solid-phase extraction with high-performance liquid chromatography and fluorescence detection for the determination of zearalenone in corn samples, **Journal of Separation Science** 2018, 41, 4348-4354.
41. R. Elsaman; G. A. M. Ali; M. A. M. Uosif; K. H. S. Shaaban; Y. B. Saddeek; K. A. Saddeek; K. F. Chong, Natural radioactivity of some Egyptian materials used in glasses

manufacturing and glass ceramics, **International Journal of Radiation Research** 2018, 16, 207-215.

42. R. Z. A. R. Jamaluddin; L. Y. Heng; L. L. Tan; K. F. Chong, Electrochemical Biosensor for Nitrite Based on Polyacrylic-Graphene Composite Film with Covalently Immobilized Hemoglobin, **Sensors** 2018, 18, 1343
43. E. A. A. Aboelazm; G. A. M. Ali; H. Algarni; K. F. Chong*, Flakes Size-Dependent Optical and Electrochemical Properties of MoS_2, **Current Nanoscience** 2018, 14, 416-420.
44. G. A. M. Ali; E. Megiel; J. Romanski; H. Algarni; K. F. Chong*, A wide potential window symmetric supercapacitor by TEMPO functionalized MWCNTs, **Journal of Molecular Liquids** 2018, 271, 31-39.
45. E. A. A. Aboelazm; G. A. M. Ali; H. Algarni; H. Yin; Y. L. Zhong; K. F. Chong*, Magnetic Electrodeposition of Hierarchical Cobalt Oxide Nanostructure from Spent Lithium-Ion Batteries: Its Application as Supercapacitor Electrode, **Journal of Physical Chemistry C** 2018, 122, 12200-12206.
46. H. Sadegh; G. A. M. Ali; A. S. H. Makhlouf; K. F. Chong; N. S. Alharbi; S. Agarwal; V. K. Gupta, MWCNTs-Fe_3O_4 nanocomposite for Hg(II) high adsorption efficiency, **Journal of Molecular Liquids** 2018, 258, 345-353.
47. E. R. Shaaban; A. Almohammedi; G. A. M. Ali; K. F. Chong; A. Adel; A. Ashour, Structural, Optical and electrical characteristics of sulfur incorporated ZnSe thin films, **Optik** 2018, 164, 527-537.
48. R. Z. A. R. Jamaluddin; Y. H. Lee; L. L. Tan; K. F. Chong, A Biosensor for Genetic Modified Soybean DNA Determination via Adsorption of Anthraquinone-2-sulphonic Acid in Reduced Graphene Oxide, **Electroanalysis** 2018, 30, 250-258.
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50. A. A. Ghawanmeh; K. F. Chong; S. Sarkar; M. A. Bakar; R. Othaman; R. M. Khalid, Colchicine prodrugs and codrugs: Chemistry and bioactivities, **European Journal of Medicinal Chemistry** 2018, 144, 229-242.

51. G. A. M. Ali; A. Divyashree; S. Supriya; K. F. Chong; A. S. Ethiraj; M. V. Reddy; H. Algarni; G. Hegde, Carbon nanospheres derived from Lablab purpureus for high performance supercapacitor electrodes: a green approach, **Dalton Transaction** 2017, 46, 14034-14044.
52. C. W. Woon; M. A. Islam; B. Ethiraj; H. R. Ong; C. K. Cheng; K. F. Chong; G. Hedge; M. Khan; M. Rahman, Carbon Nanotube-Modified MnO2: An Efficient Electrocatalyst for Oxygen Reduction Reaction, **ChemistrySelect** 2017, 2, 7637-7644.
53. S. N. S. M. Zuki; L. L. Tan; N. S. Azmi; L. Y. Heng; K. F. Chong; S. N. Tajuddin, A whole cell bio-optode based on immobilized nitrite-degrading microorganism on the acrylic microspheres for visual quantitation of nitrite ion, **Sensors and Actuators B: Chemical** 2018, 255, 2844-2852.
54. G. A. M. Ali; E. Y. L. Teo; E. A. A. Aboelazm; H. Sadegh; A. O. H. Memar; R. Shahryari-Ghoshekandi; K. F. Chong*, Capacitive performance of cysteamine functionalized carbon nanotubes, **Materials Chemistry and Physics** 2017, 197, 100-104.
55. S. M. Sarkar; M. L. Rahman; K. F. Chong; M. M. Yusoff, Poly (hydroxamic acid) palladium catalyst for heck reactions and its application in the synthesis of Ozagrel, **Journal of Catalysis** 2017, 350, 103-110.
56. G. A. M. Ali; M. M. Yusoff; E R. Shaaban; K. F. Chong*, High Performance MnO_2 Nanoflower Supercapacitor Electrode by Electrochemical Recycling of Spent Batteries, **Ceramics International** 2017, 43, 8440-8448.
57. W. K. Chee; H. N. Lim; Z. Zainal; I. Harrison; N. M. Huang; Y. Andou; K. F. Chong; A. Pandikumar, Electrospun nanofiber membranes as ultrathin flexible supercapacitors, **RSC Advances** 2017, 7, 12033-12040.
58. B. H. Mandal; M. L. Rahman; M. M. Yusoff; K. F. Chong; S. M. Sarkar, Bio-waste corn-cob cellulose supported poly (hydroxamic acid) copper complex for Huisgen reaction: Waste to wealth approach, **Carbohydrate Polymers** 2017, 156, 175-181.
59. N. S. M. Noor; L. L. Tan; L. Y. Heng; K. F. Chong; S. N. Tajuddin, Acrylic microspheres-based optosensor for visual detection of nitrite, **Food Chemistry** 2016, 207, 132-138.

60. C. Y. Foo; H. N. Lim; M. A. Mahdi; K. F. Chong; N. M. Huang, High-Performance Supercapacitor Based on Three-Dimensional Hierarchical rGO/Nickel Cobaltite Nanostructures as Electrode Materials, **The Journal of Physical Chemistry C** 2016, 120, 21202-21210.
61. E. Y. L. Teo; L. Muniandy; E-P. Ng; F. Adam; A. R. Mohamed; R. Jose; K. F. Chong*, High surface area activated carbon from rice husk as a high performance supercapacitor electrode, **Electrochimica Acta** 2016, 192, 110-119.
62. G. A. M. Ali; O. A. Fouad; S. A. Makhlouf; M. M. Yusoff; K. F. Chong*, Optical and electrochemical properties of Co_3O_4/SiO_2 nanocomposite, **Advanced Material Research** 2016, 1133, 447-451.
63. G. Hedge; S. A. A. Manaf; A. Kumar; G. A. M. Ali, K. F. Chong; Z. Ngaini; K. V. Sharma, Biowaste sago bark based catalyst free carbon nanospheres: Waste to wealth approach, **ACS Sustainable Chemistry & Engineering** 2015, 3, 2247-2253.
64. G. A. M. Ali; S. A. Makhlouf; M. M. Yusoff; K. F. Chong, Structural and electrochemical characteristics of graphene nanosheets as supercapacitor electrodes, **Reviews on Materials Science** 2015, 41, 35-43.
65. G. A. M. Ali; M. M. Yusoff; Y. H. Ng; H. N. Lim; K. F. Chong*, Potentiostatic and galvanostatic electrodeposition of manganese oxide for supercapacitor application: A comparison study, **Current Applied Physics** 2015, 15, 1154-1147.
66. E. Y. L. Teo; H. N. Lim; R. Jose; K. F. Chong*, Aminopyrene functionalized reduced graphene oxide as a supercapacitor electrode, **RSC Advances** 2015, 5, 38111-38116.
67. G. A. M. Ali; O. A. G. Wahba; A. M. Hassan; O. A. Fouad; K. F. Chong*, Calcium-based nanosized mixed metal Oxides for supercapacitor application, **Ceramics International** 2015, 41, 8230-8234.
68. W. K. Chee; H. N. Lim; I. Harrison; K. F. Chong; Z. Zainal; C. H. Ng; N. M. Huang, Performance of flexible and binderless polypyrrole/graphene oxide/zinc oxide supercapacitor electrode in a symmetrical two-electrode configuration, **Electrochimica Acta** 2015, 157, 88-94.

69. A. A. Radhiyah; M. I. Izwan; V. Baiju, K. F. Chong; I. Jamil, R. Jose, Doubling of electrochemical parameters via the pre-intercalation of Na+ in layered MnO_2 nanoflakes compared to α-MnO_2 nanorods, **RSC Advances** 2015, 5, 9667-9673.
70. R. M. Zaid; F. C. Chong; E. Y. L. Teo; E-P. Ng; K. F. Chong*, Reduction of graphene oxide nanosheets by natural beta carotene and its potential use as supercapacitor electrode, **Arabian Journal of Chemistry** 2015, 8, 560-569.
71. N. Zainudin; M. M. Yusoff; K. F. Chong*, Flow injection analysis nitrite sensor based on reduced graphene oxide modified electrode, **Advanced Materials Research** 2015, 1113, 411-416.
72. G. A. M. Ali; M. M. Yusoff; K. F. Chong*, Electrochemical properties of electrodeposited MnO_2 nanoparticles, **Advanced Materials Research** 2015, 1113, 550-553.
73. G. A. M. Ali; S. A. A. Manaf; A. Kumar; K. F. Chong; G. Hegde, High performance supercapacitor using catalysis free porous carbon nanoparticles, **Journal of Physics D: Applied Physics** 2014, 47, 495307-495312.
74. G. A. M. Ali; L. L. Tan; R. Jose; M. M. Yusoff; K. F. Chong*, Electrochemical performance studies of MnO_2 nanoflowers recovered from spent battery, **Materials Research Bulletin** 2014, 60, 5-9.
75. N. Hindryawati,; G. P. Maniam; M. R. Karim; K. F. Chong, Transesterification of used cooking oil over alkali metal (Li, Na, K) supported rice husk silica as potential solid base catalyst, **Engineering Science and Technology, An International Journal** 2014, 17(2), 95-103.
76. N. Zainudin; A. R. M. Hairul; M. M. Yusoff; L. L. Tan; K. F. Chong*, Impedimetric graphene-based biosensor for the detection of Escherichia coli DNA, **Analytical Methods** 2014, 6(19), 7935-7941.
77. G. A. M. Ali; O. A. Fouad; S. A. Makhlouf; M. M. Yusoff; K. F. Chong*, Co_3O_4/SiO_2 nanocomposites for supercapacitor application, **Journal of Solid State Electrochemistry** 2014, 18, 2505-2512.

78. S. M. Supian; L. L. Tan; Y. H. Lee; K. F. Chong, Quantitative determination of Al(III) ion by using Alizarin Red S including its microspheres optical sensing material, **Analytical Methods** 2013, 5(10), 2602-2609.
79. R. A. Aziz; I. I. Misnon; K. F. Chong; M. M. Yusoff; R. Jose, Layered sodium titanate nanostructures as a new electrode for high energy density supercapacitors, **Electrochimica Acta** 2013, 113, 141-148.
80. E. Y. L. Teo; R. M. Zaid; T. L. Ling; K. F. Chong*, Facile corrosion protection coating from graphene, **International Journal of Chemical Engineering and Applications**, 2012, 3, 453-455.
81. K. F. Chong; K. P. Loh; K. Ang; Y. P. Ting, Whole cell environmental biosensor on diamond, **Analyst** 2008, 6, 739-743.
82. K. F. Chong; K. P. Loh; S. R. K. Vedula; C. T. Lim; H. Sternschulte; D. Steinmuller; F-S. Sheu; Y. L. Zhong, Cell adhesion properties on photochemically functionalized diamond, **Langmuir** 2007, 23 (10), 5615-5621.
83. Y. L. Zhong; K. F. Chong**;** P. W. May; Z-K. Chen; K. P. Loh, Optimizing biosensing properties on undecylenic acid-functionalized diamond, **Langmuir** 2007, 23(10), 5824-5830.

Awards:

1. Obelisk World Invention Award + Platinum Award + Diamond Award + Gold Award: "Biowaste as Energy Storage Supercapacitor" – British Invention Show (BIS), United Kingdom (2015).
2. Gold Medal: "Biowaste as Energy Storage Supercapacitor" - 26th International Invention & Innovation Exhibition (ITEX), Malaysia (2015)
3. Gold Medal + Green Technology Award: "Energy Storage Supercapacitor from Biowaste" – CiTREX, Malaysia (2015)
4. Gold Medal: "Recycled Spent Battery for Energy Storage Supercapacitor" -XVII Moscow International Salon on Invention and Innovation Technologies (ARCHIMEDES) , Russia (2014)

5. Gold Medal: "Recycled Spent Battery for Energy Storage Supercapacitor" - 24th International Invention & Innovation Exhibition (ITEX), Malaysia (2013)
6. Gold Medal: "Self-Plasticized Acrylic Microsphere-based Chemosensor for Visual Detection of Nitrite in Edible Bird's Nests" - 24th International Invention & Innovation Exhibition (ITEX), Malaysia (2013)
7. Gold Medal: "Metal Nanofibers with Unmatched Surface Area for Electronic Applications" - Seoul International Invention Fair (SIIF), Korea (2012)
8. Best Paper: "Enhanced lead ions detection on bacteria modified boron doped diamond" - 2nd International Conference on Chemical Engineering and Applications (CCEA), Maldives (2011)
9. Best Paper: " Electrochemical Study of Graphene and its Oxidized Form" - Malaysian Technical Universities International Conference on Engineering and Technology (MUICET), Malaysia (2011)
10. Scholarship: "Development of Biosensor and Electrochemical Studies of Carbon-based Materials" - National University of Singapore Nanoscience and Nanotechnology Initiative (NUSNNI), Singapore (2005-2009)

Research Grants as Principal Investigator:

1. 2020: "Optimizing Surface Chemistry Of Graphene Aerogel Towards Water Pollutants Adsorption" (Malaysia Toray Science Foundation: RM 20,000)
2. 2019-2021: "Structural Investigation of Graphene Aerogel Towards Water Pollutants Adsorption" (FRGS: RM 141,578.00)
3. 2019-2020: "Nanocarbons-Graphene hybrid Material as High Performance Supercapacitor" (Asean India Science & Technology Development Fund AISTDF: Rs. 3,023,438)
4. 2017-2019: "The study of correlation between electrodeposition parameters and performance of graphene-Al oxide composite coating for corrosion and wear resistant" (FRGS: RM 84,633)
5. 2017-2019: "Optimization of Electrodeposition for Cobalt Recovery From Spent Lion Ion Battery" (UMP-Internal: RM 31,200)

6. 2016-2018: “Synergistic combination of processing parameters on the electrochemical exfoliation of graphite into graphene” (FRGS: RM 68,000)
7. 2014-2016: “Energy Storage Supercapacitor Fabrication from Spent Battery Recycling” (MOSTI-eScienceFund: RM 192,000.00)
8. 2014-2016: “Development of Label-Free Electrochemical Detection System for Nitrite Ions in Edible Bird Nest” (RACE: RM 50,000.00)
9. 2013-2014: “Supercapacitors from Waste Resources” (MTUN-COE Showcase: RM 10,000.00)
10. 2012-2014: “ Development of Nitrite Biosensor Based on Graphene Nanomaterial” (UMP-Internal: RM 38,500.00)
11. 2012-2014: “Exploratory Study of Graphene-Based Nucleic Acid Biosensor for Food Pathogen Detection” (ERGS: RM 89,000.00)
12. 2012-2014: “Graphene Synthesis and Characterization” (MTUN-COE: RM 184,000.00)
13. 2011-2013: “Carbon Nanocomposite Paper for Energy Storage” (UMP-Internal: RM 34,500.00)
14. 2010-2012: “Electrochemical Study on Graphene and its Functional Derivatives” (UMP-Internal: RM 40,000.00)

Patents:

1. Malaysia IP: “A Method of Producing Electrodes for Supercapacitor” (PI2013702077)
2. Malaysia IP: “Energy Storage Supercapacitor from Biomasss” (PI 2015704170)

Consultation Projects for:

1. Malaysian Solar Resources (M) Sdn. Bhd.
2. Tan Kor Seng & Sons Rubber Works (M) Sdn. Bhd.
3. Enzyme Technology Malaysia Sdn. Bhd.
4. Petronas Research Sdn. Bhd.
5. Lynas Malaysia Sdn. Bhd.
6. Nilam Kekal Sdn. Bhd.

Supervision:

As main supervisor:

1. 1 Postdoctoral scholar
   - Dr. Gomaa A.M. Ali (2017-2019)

2. 8 PhD. Students (5 completed, 2 on-going)
   - Dr. Gomaa A. M. Ali (Completed)
   - Dr. Ellie Teo Yi Lih (Completed)
   - Dr. Nurulasma Zainudin (Completed)
   - Dr. Nurul Huda binti Abu Bakar (Completed)
   - Dr. Muhammad Thalji (Completed)
   - Ms. Geraldine Chan Sue Ching (On-going)
   - Dr. Abdullah Ghawanmeh (Completed)
   - Mr. Lee Soon Poh (On-going)

3. 5 MSc. Students (5 completed)
   - Ms. Puteri Emme Marina (Completed)
   - Ms. Lim Wan Sin (Completed)
   - Mr. Eslam Atef Abdelaziz Aboelazm (Completed)
   - Ms. Nur Syarmin (Completed)
   - Mr. Yasin Baraqouni (Completed)

Evaluation experience:

1. External Assessor: BSc. (Hons.) Pharmaceutical Chemistry, International Medical University (2018 – 2019) (2022 – 2023)
2. Panel: MyBRAIN15 (2018)
3. Panel: KPT FRGS (2020. 2021, 2022) & KPT KKP (2020)
4. Panel: Academic Promotion UKM (2020)

5. Judge: Science Competition by Foo Chow Association (2016)
6. Judge: UMP CITREX Competition (2014)
7. Panel: JPA Overseas Scholarship Interview (2011)