

CURRICULUM VITAE

1. PERSONAL DATA

Name : Assoc. Prof. Ts. Dr Dasmawati Mohamad
Nationality : Malaysian
Current Position : Assoc. Prof.
1. Editor-In-Chief of Archives of Orofacial Sciences (2017-till now)
2. Vice President of Malaysian Biomaterials Society(2022-2026)
3. President of Malaysian Dental Materials Society (2024-2027)
4. Asian Network of Dental Materials Society (ANDeMS), Board Member (Aug 2023- Aug 2025), International
5. Asian Biomaterials Federation, Council Member (2020-2024), (International)
Researcher ID : Researcher ID: F-6467-2012
SCOPUS ID: 35484971000
Google Scholar ID: HYjax4cAAAAJ
H-Index : 19(SCOPUS), Google Scholar (25), WoS (14)
Qualifications : PhD (Manchester, UK), MSc (Manchester, UK), BEng in Chemical Eng. (Birmingham, UK)
Field of specialization : Biomaterials Science
Tel (office) /HP : 09-7675807/013-9213998
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2. PROFESSIONALS

1. Professional Technologist, Malaysia Board of Technologies(MBOT), since 9/21, Membership no: PT21090160
2. Malaysian Biomaterials Society (MBS), President, 2013-2020, Vice President, (2009-2013),(2020-2024) (National). Membership no: L-MBS/10 (Life Membership)
3. Young Scientist Network-Academy Science of Malaysia (YSN-ASM), Member, 2012 to 2015, (National)
4. IChemE, Associate Member Membership no: 20109130
5. Academy of Dental Materials (ADM), Member, (International)
6. International Association of Dental Research (IADR), Member, (International) Membership no: 545019
7. Malaysian Division of International Association of Dental Research (IADR), (National) Membership no: M 0199
8. Electron Microscopy Society of Malaysia (National) Membership no: D005 (Life Membership)

3. ACHIEVEMENTS

Research Grant:

Active grants:

1. The effects of 3D printed Polyamide 12 composite pores on osteogenic and angiogenic differentiation, FRGS Grant from Ministry of Higher Education (MOHE), RM 129,050.00, Principal Investigator, 07/09/2021- 31/03/2025.
2. Elucidation of silanization effect of kenaf cellulose nanocrystals on remaining double bond in reinforced dental composite polymerization. FRGS Grant from Ministry of Higher Education (MOHE), Co-Researcher, RM 127, 027.00. 1/8/2024-31/7/2027
3. Elucidating the Mechanism and Function of Reactive Oxygen Species in Regeneration of Bone Using Ultrasound Therapy. FRGS Grant from Ministry of Higher Education (MOHE), Co-Researcher, RM 144, 400.00. 01/08/24-31/7/2027
4. Elucidating the impact of various photoinitiators on the properties of newly developed dental rice-husk-based flowable resin composites. FRGS Grant from Ministry of Higher Education (MOHE), Co-Researcher, RM 147, 005.00. 01/08/24-31/7/2027
5. Effects of different camphorquinone concentrations on the physical and mechanical properties of experimental green based flowable resin composites, Short Term Grant (USM) RM 41,065.00, Co-Researcher, 1/11/2022 – 31/10/2025
6. Evaluation of physico-mechanical properties of novel zirconia microfibred nanozirconia filled composite resin. Short Term Grant (USM) RM 44,647.00, Co-Researcher, 1/12/2024-30/11/2026
7. Elucidating Physicochemical Properties and Various Stresses of Novel and Innovative Nano Zirconia Titanium Microfibred Chitosan Calcium Silico Phosphate Biomaterial. RM 91,165.00, Research University (individual) USM. Co-Researcher, 1/12/2024-30/11/2026
8. Incorporation of MgAl Layered double hydroxide (LDH) in Polyamide for Fluoride Rechargeable Denture Base. Short Term Grant (USM) Co-Researcher, RM 45957, 1/9/2024-31/8/2026
9. Mechanical Reinforcement of Dental Materials for Removable Dental Prosthesis Construction. Lembaga Kenaf Tembakau Negara (LKTN) Co-Researcher, RM 70,000.00, 10/5/2024-9/5/2026

Supervision of Postgraduate Students:

Level	PhD		MSc		MSc Mixed Mode	
	Active	Graduated	Active	Graduated	Active	Graduated
Main supervisor	6	3	-	10	-	-
Co-supervisor	3	7	1	16	6	3

Participation in Thesis and Oral Examination Committees

Level	PhD	MSc	Doctor in Restorative Dentistry
Internal examiner (USM)	4	2	-
External examiner (UKM, UPSI, UM, IIUM)	6	7	1 (UiTM)

Patents/ Copyrights/Trademark/ Filing:

1. Ismail Ab Rahman, Adam Husein, Dasmawati Mohamad, Noor Sheeraz Zulkifli (2021), *Hybrid Spherical Silica Nanoparticles*. MY-187327-A. MyIPO
2. 3D-CPACC, 3D Craniofacial Polyamide Composite Customised Implant, TM2020023725
3. Compounding Process Flow for Polyamide Composite as Alloplastic 3D Printing Filament, LY2022P05251
4. Patient Specific Reconstruction in Hybrid Cranioplasty Copyright. MyIPO, LY2019000404

Linkage with Industry:

1. NDA with GaiaPebble and SIRIM Berhad
2. MoA with RSAT Company: Research Collaboration Agreement on Compounding of Rice Husk Nanosilica Composite With Suitable Additives Via Sintering Process, 17th Oct 2021-17th Oct 2023
3. MoA with 3D Gens Company: Research Collaboration Agreement on Cranio-Maxillofacial Patient Specific Implant, 17th March 2021-17th March 2023

Achievements/Awards / Recognitions:

1. Excellent Service Award (USM) 2013, 2015, 2023
2. Silver Medal Award, A Novel Computer Aided Reconstruction in Hybrid Cranioplasty, PECIPTA 2019, Nov 2019, UiTM, Batu Pahat, Johor
3. Silver Medal Award, P.S.I. Hybrid Cranioplasty, ITEX 2019, 2-4 May 2019 KLCC, Kuala Lumpur
4. Gold Medal Award, GiZiDent, MTE 2019, PWTC, Kuala Lumpur
5. Gold Medal Award, G-HybriDFIL Flow, ITEX 2018, 10-12 May 2018 KLCC, Kuala Lumpur
6. Silver Medal Award, 3D-CPACC, ITEX 2018, 10-12 May 2018 KLCC, Kuala Lumpur
7. Outstanding Women in Biomaterials, Venus International Women Awards, VIWA 2018, Chennai, India, 3rd Mar 2018
8. Gold Medal Award, G-ACERIN & 3D-PACC, Research Innovation Symposium Exhibition 2015 (RISE 2015), Nov 2015, UiTM Shah Alam
9. Gold Medal Award, D-HybriDFil, Brussels Eureka, The Belgian and International Trade Fair for Technological Innovation, 2014
10. Gold Medal Award, G-HybriDFIL, PECIPTA 2013, 7-9 November 2013 KLCC, Kuala Lumpur

11. Silver Medal Award at ITEX 2013, G-HybridFIL, Malaysian Inventions and design Society (MINDS), 9-11 May 2013, KLCC
12. Diplome Invention Geneva Award 2011, Salon International Des Invention, Geneva, 6 – 10 April 2011
13. Gold Medal Award, KelFiL at MTE 2010, Malaysian Association of Research Scientists (MARS), 4th-6th Feb 2010, PWTC, Kuala Lumpur. Malaysia.
14. Bronze Medal Award, KelFiL, PECIPTA 2009, International Exposition of Research of Institutions of Higher learning, KLCC, 8th-10th October 2009.
15. Silver Medal Award, MyDental Bib, PECIPTA 2009, International Exposition of Research of Institutions of Higher learning, KLCC, 8th-10th October 2009. Malaysia.
16. Young Scientists of Malaysia's Representative for 59th Meeting of Nobel Laureate Prize Winners with Young Scientists in Lindau, Germany. Awarded by Academy Science Malaysia & Lindau Council Germany. (28th June- 3rd July 2009). Malaysia & Germany.
17. 1st Place for Senior Travel Award IADR Malaysian Section, 8th Scientific Meeting of IADR Malaysian Section, UiTM Shah Alam, 10 Jan 2009

4. RESEARCH PUBLICATIONS:

1. X Zhang, **D Mohamad**, M Omar, NA Abdullah. 2025. The Effects of Different Infill Densities of 3D Printed Polyamide 12 Composite on MC3T3-E1 Adhesion and Proliferation. Malaysian Journal of Microscopy, 21 (1), 311-319
2. Nor Ain Fatihah Azlisham, Yanti Johari, **Dasmawati Mohamad**, Mohd Firdaus Yhaya, Zuliani Mahmood. Physicomechanical properties and polymerization shrinkage of the newly developed radiopaque flowable composite derived from rice husk. Polymer Composites, 2024. Q1/Q2, Impact factor: 4.8.
3. Nor Ain Fatihah Azlisham, Fatimah Suhaily Abdul Rahman, Zuliani Mahmood, **Dasmawati Mohamad**, Yanti Johari, Ola Barakat Al-Batayneh. Comparative analysis of hydrazinyl coumarin derivative incorporation in resin-modified and conventional glass ionomer cement. Journal of Taibah University Medical Science, 2024. 19 (6), 1119-1129. Q2, Impact factor: 1.5.
4. Nor Ain Fatihah Azlisham, Yanti Johari, **Dasmawati Mohamad**, Mohd Firdaus Yhaya, Zuliani Mahmood. Mechanical properties of newly developed flowable composite derived from rice husk at different monomer ratios. Journal of Mechanical Engineering, 2024, 21 (3), 77-91. Scopus-indexed.
5. Ab Rasid, N., Alawi, R., Johari, Y., Muttlib, N.A.A., Hussin, M.H., **Mohamad, D.**, Karobari, M.I. 2024. Effect of surface treatment hybridization of kenaf nanocellulose on the thermal stability and mechanical properties of rice husk nanohybrid dental composite. Cellulose. <https://doi.org/10.1007/s10570-024-06051-z>
6. Nor Ain Fatihah Azlisham, Yanti Johari, **Dasmawati Mohamad**, Mohd Firdaus Yhaya, Zuliani Mahmood. Degree of conversion and physicochemical properties of newly developed flowable composite derived from rice husk using urethane dimethacrylate monomer. Journal of Engineering in Medicine, 2023, 00 (0), 1-9. WoS-indexed Q3, Impact factor: 1.7.
7. R Nursin, MH Harun, **D Mohamad**, SK Mohd Bakhori, S Mahmud, (2024). 2024. Subcutaneous tissue reaction to a novel nano zinc oxide eugenol dental cement. Bio-Medical Materials and Engineering, 35(2): 139-151. DOI: 10.3233/BME-230118. (Q4: IF 1.0)
8. Mohd Fauzi Mh Busra, Daniel Law Jia Xian, Yogeswaran Lokanathan, Ruszymah Haji Idrus , " Functional Bio-based Materials for Regenerative Medicine: From Bench to Bedside (Part 2) ", Bentham Science Publishers (2024). ISBN: 978-981-5179-34-

7 <https://doi.org/10.2174/97898151793301240101>

9. Yassin SM, **Mohamad D**, Togoo RA, Sanusi SY, Johari Y (2023). Physicomechanical properties of resin-based pit and fissure sealants reinforced with rice husk derived nano silica and nanohydroxyapatite. Arch Orofac Sci, 18(2): 139–151. <https://doi.org/10.21315/aos2023.1802>.
10. Azlisham NAF, Johari Y, **Mohamad D**, Yhaya MF, Mahmood Z. Degree of conversion and physicomechanical properties of newly developed flowable composite derived from rice husk using urethane dimethacrylate monomer. (2023). Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine. 2023;237(12):1339-1347. doi:[10.1177/09544119231208222](https://doi.org/10.1177/09544119231208222) (Q4: IF1.8)
11. **Mohamad, D.**, Abdullah, A.M., Omar, M. (2023). Sustainable Biomaterials for 3D Printing. In: Wan Kamarul Zaman, W.S., Abdullah, N.A. (eds) Sustainable Material for Biomedical Engineering Application. Springer, Singapore. https://doi.org/10.1007/978-981-99-2267-3_14 289-307. eBook ISBN 978-981-99-2267-3
12. Syed M Yassin, **D Mohamad**, Y Johari, Sarliza Yasmin Sanusi, Rafi Ahmad Togo, (2023). Do nanofillers provide better physicomechanical properties to resin-based pit and fissure sealants? A systematic review. J Mechanical Behavior of Biomedical Materials. Vol 145, 1751-6161(Q2: IF 3.9)
13. Abdul Manaf Abdullah, **Dasmawati Mohamad** (2023). Antibacterial Properties of Graphene and its Reinforcement Effect on Compressive Properties of PMMA. Biointerface Research in Applied Chemistry, Vol 13 (4), DOI 10.33263/BRIAC134.393 (Q3: IF 0.35)
14. Sheng S.B., Alawi R., Johari Y., Abdul Muttlib N.A., Hussin M.H., **Mohamad D.**, Karobari M.I., (2023). Effects of Fiber Loading on Mechanical Properties of Kenaf Nanocellulose Reinforced Nanohybrid Dental Composite Made of Rice Husk Silica, *Journal of Functional Biomaterials*, 14 (4), 184.
15. **Dasmawati Mohamad** and Habsah Hasan (2022). Nanoparticles as antibacterial agent for dental restorative materials and their antibacterial activity evaluation. Handbook of Microbial Nanotechnology, Elsevier Academic Press, pp. 209-224. ISBN: 978-0-12-823426-6
16. Abdul Manaf Abdullah, **Dasmawati Mohamad**, Hazizan Md Akil, Nurul Asma Abdullah (2022). Mechanical and Morphological Properties of Carbon Fibre and Its Composite for Biomaterials Application. Applied Nanoscience. <https://doi.org/10.1007/s13204-021-02125-7> (Q3: 3.869)
17. Matheel Al-Rawas, Yanti Johari, **Dasmawati Mohamad**, Mohd Fadhli Khamis, Wan Muhamad Amir W Ahmad, Zaihan Ariffin, Adam Husein, (2021). Water sorption, solubility, degree of conversion, and surface hardness and topography of flowable composite utilizing nano silica from rice husk. Journal of Materials Research and Technology. 15. 4178-4184. <https://doi.org/10.1016/j.jmrt.2021.10.024>
18. Fatimah Suhaily Abdul Rahman, **Dasmawati Mohamad**, Habsah Hasan, Hasnah Othman, (2021). Physical Properties of Newly Developed Resin Modified Glass Ionomer Cement with Synthesised Coumarin Derivatives, Sains Malaysiana, 50(8). (Q4: IF 0.8)
19. Siti Khadijah Mohd Bakhori, Shahrom Mahmud, **Dasmawati Mohamad**, Sam'an Malik Masudi, Azman Seeni, (2021). Cytotoxicity determination of nano-zinc oxide eugenol on human gingival fibroblast cells, Materials Chemistry and Physics, 268. 124649 <https://doi.org/10.1016/j.matchemphys.2021.124649>
20. Asanah Radhi, **Dasmawati Mohamad**, Fatimah Suhaily Abdul Rahman , Abdul Manaf Abdullah , Habsah Hasan, (2021). Mechanism and Factors Influence of Graphene-based Nanomaterials Antimicrobial Activities and Application in Dentistry, Journal of Materials Research and Technology, 11:, 1290-1307 (Q1: IF 5.289)

