

CURRICULUM VITAE



PERSONAL PROFILE

Name: Syafawati Nadiah Binti Mohamed
Current Position: Senior Lecturer
Address: School of Physics and Material Studies,
Universiti Teknologi MARA,
40450 Shah Alam,
Selangor, Malaysia
E-mail: syafawati@salam.uitm.edu.my

ACADEMIC QUALIFICATION

2008 – M.Sc. in Physics
Universiti Teknologi Malaysia

2006 – B.Sc. (Hons) Physics
Universiti Teknologi MARA

RESEARCH EXPERIENCE

Field of Interests: Oxide Glasses, Ultrasonic, Conducting Materials, Optical Materials

Research Projects/Grants

1. *Structural, elastic, magnetic and electronic properties of B-site cation doping on tellurium-based perovskite-oxide materials, $\text{LaCaCo}_{1-x}\text{A}_x\text{TeO}_6$ ($\text{A}=\text{Ni}^{2+}, \text{Mn}^{2+}$) (2019–2021)*

Fundamental Research Grant Scheme (FRGS)

Ministry of Education Malaysia, MYR 61 800

Co-Researcher

2. *Enhancement of upconversion luminescence by metallic silver nanoparticles addition in Er^{3+} /vanadium co-doped $(59-x-y)\text{B}_2\text{O}_3-20\text{Na}_2\text{O}-20\text{CaO}-y\text{V}_2\text{O}_5-1\text{Er}_2\text{O}_3-x\text{AgCl}$ mixed ionic-electronic glasses (2019–2021)*

Fundamental Research Grant Scheme (FRGS)

Ministry of Education Malaysia, MYR 82 200

Principle Researcher

3. *Elastic nature of germanate anomaly and optical interaction mechanism studies Er^{3+} doped sodium lead germanate glass (2015–2018)*

Research Acculturation Grant Scheme (RAGS)

Ministry of Education Malaysia, MYR 50 000

Co-Researcher

4. *Dielectric and elastic studies in the conductivity anomaly region of $(60-x)\text{B}_2\text{O}_3-20\text{Na}_2\text{O}-20\text{CaO}-x\text{V}_2\text{O}_5$ borate glasses (2015–2018)*

Research Acculturation Grant Scheme (RAGS)

Ministry of Education Malaysia, MYR 50 000

Co-Researcher

5. *Axial compression and energy absorption characteristics of high-strength thin walled tube under impact load* (2014–2017)

Research Acculturation Grant Scheme (RAGS)

Ministry of Education Malaysia, MYR 80 000

Co-Researcher

6. *Preparation and characterization of lithium-based glass ceramic conductor materials* (2009–2013)

Fundamental Research Grant Scheme (FRGS)

Ministry of Education Malaysia, MYR 50 000

Principle Researcher

7. *Elastic and structural properties of $Te_2O-NB_2O_5-ZnO$ glasses* (2008–2012)

Dana Kecemerlangan

Universiti Teknologi MARA, MYR 10 000

Principle Researcher

SUPERVISION/TEACHING EXPERIENCE

Postgraduate & Undergraduate Supervision/ Co-Supervisions

1. (1) M.Sc Student -(completed)

Mazidah Binti Hamidii

TITLE: *Preparation and characterization of lithium-based glass ceramic conducting material*

2. (15) undergraduate final year projects-(on-going and completed)

Teaching Subjects (Science Foundation & Degree Programmes)

Foundation Physics I (PHY093)

Physics I (PHY406)

Fundamental Physics I: Mechanics and Thermodynamics (PHY430/PHY433)

Fundamental Physics II: Electricity and Magnetism (PHY431/PHY443)

Physics for Non-Major (PHY400)

Physics: Waves (PHY413)

Waves and Optics (PHY534)

Thermal Physics (PHY630)

Physics Laboratory (PHY093/PHY406/PHY400/PHY430/PHY431/PHY433/PHY443)

Advanced Physics Laboratory I: Photoelectric, PV system and Electromagnetic (PHY63)

Advanced Physics Laboratory II: Electronics and Instrumentation

PUBLICATIONS

S. N. Mohamed, M. K. Halimah, R. Y. Subban, A. K. Yahya (2020) AC conductivity and dielectric properties in mixed ionic–electronic $20Na_2O-20CaO-(60-x)B_2O_3-xV_2O_5$ glasses. *Physica B: Condensed Matter*, 412480.

Z. Mohamed, N. Ibrahim, M. A. Ghani, S. D. Safian, and **S. N. Mohamed** (2019) Structural and electrical transport properties of $(La_{0.7-x}Y_x)Ca_{0.3}MnO_3$ manganites. *Results in Physics*, 12, 861-866.

S. N. Mohamed, A. K. Yahya (2018) Effects of V_2O_5 on elastic, structural, and optical properties of mixed ionic–electronic $20Na_2O-20CaO-(60-x)B_2O_3-xV_2O_5$ glasses. *Ionics*, 24(9), 2647-2664.

Maziidah Hamidi, **S. N. Mohamed**, Raja Ibrahim Putera Raja Mustapha, Oskar Hasdinor Hassan, and Muhd Zu Azhan Yahya (2015) Vibrational analysis of $Li_{1+x}Al_xTi_{2-x}(PO_4)_3$ ($0.0 < x < 0.5$) glass

ceramic electrolytes prepared by acetic acid assisted sol-gel method. *Scientific Research Journal* 12, no. 2: 35-44.

Hafizi Lukman, Amir Radzi Ab. Ghani, Hafizan Hashim, **S. N. Mohamed** (2014) Energy absorption of longitudinally grooved square tubes under axial compression. *Journal of Applied Science and Agriculture*, 119–125.

Maziidah Hamidi, **S. N. Mohamed**, M. Z. A. Yahya (2012) Conductivity studies on $\text{Li}_{1+x}\text{Al}_x\text{Ti}_{2-x}(\text{PO}_4)_3$ ($x=0.0-0.5$) due to addition of Al^{3+} trivalent cation. *Journal of Advanced Materials Research*, 1869–1872.

Maziidah Hamidi, **S. N. Mohamed**, M. Z. A. Yahya (2012) Preparation and characterization of $\text{Li}_{1.4}\text{Al}_{0.4}\text{Ti}_{1.6}(\text{PO}_4)_3$ conducting electrolyte. *Journal of Solid State Science and Technology*, 20, 82-87.

Maziidah Hamidi, **S. N. Mohamed**, Abdul Malik Marwan Ali, Tan Winnie, Muhd Zu Azhan Yahya (2012) Preparation and characterization of $\text{Li}_{1.4}\text{Al}_{0.4}\text{Ti}_{1.6}(\text{PO}_4)_3$ conducting electrolyte, *IEEE Symposium on Business, Engineering and Industrial Applications*, 53–56.

N. B. Mohamed, A. K. Yahya, M. S. M. Deni, **S. N. Mohamed**, M. K. Halimah, H. A. A. Sidek (2010) Effects of concurrent TeO_2 reduction and ZnO addition on elastic and structural properties of $(90-x)\text{TeO}_2-\text{Nb}_2\text{O}_5-(x)\text{ZnO}$. *Journal of Non-Crystalline Solids*, 356, 1626–1630.

S. N. Mohamed, N. A. Johari, A. M. M. Ali, M. K. Harun, M. Z. A. Yahya (2008) Electrochemical studies on expoxidised natural rubber-based gel polymer electrolytes for lithium air cells. *Journal of Power Sources*, 183, 351–354.

CONFERENCES

S. N. Mohamed, N.H. Azali, H. Lukman, A.K.Yahya, 7th International Conference on Solid State Sciences and Technology (ICSSST2019), 11th–13th November 2019, Putrajaya, Malaysia.

S. N. Mohamed, A.K.Yahya, 29th Regional Conference on Solid State Sciences and Technology (RCSST2016), 15th–17th November 2016, Johor Bahru, Malaysia.

S. N. Mohamed, 24th Regional Conference on Solid State Sciences and Technology (RCSST2008), 30th Nov–2nd Dec 2008, Port Dickson, Malaysia.

ACADEMIC & RESEARCH AWARDS

I-eSIX 2018, **Silver Medal**– International Engineering & Science Innovation Exhibition, UiTM cawangan Pulau Pinang, Malaysia.

IIDEX 2013, **Gold Medal**– Invention, Innovation & Design Expo, DATC, UiTM Shah Alam, Malaysia.

IID 2010, **Bronze Medal**– Invention, Innovation & Design, Dewan Sri Budiman, UiTM Shah Alam, Malaysia.

Recipient of Publication Award Incentive 2007 from Faculty of Applied Sciences

Recipient of Academic Scholarship 2014, Malaysian Ministry of Higher Education

Best student Award for B.Sc. (Hons) Physics, UiTM Convocation 2006

Best Dissertation Award from Malaysian Solid State Science and Technology Society (MASS) 2006

PROFESSIONAL MEMBERSHIPS

Professional Technologist (Ts.)– Malaysia Board of Technologist

Graduate Technologist– Malaysia Board of Technologist

Life member– Malaysian Solid State Science and Technology Society (MASS)

Research Initiative Group; Ultrasonic od Novel Metals and Oxides Research Group (UNMOX) - University