

CURRICULUM VITAE



Personal Information

Name: Rosdiyana Binti Hasham@Hisam
Adress: Faculty of Applied Sciences
Universiti Teknologi MARA, 40450,
Shah Alam, Selangor, Malaysia.
Email: rosdiyana@salam.uitm.edu.my ; rosdiyanahisam@gmail.com
Contact: +6013-2090799, +60355435586

Academic Qualification

Name of Degree: *Doctor of Philosophy (Science)*, 2017
Institution: Universiti Teknologi MARA, Shah Alam, Malaysia
Name of Degree: *Master of Science (Physics)*, 2008
Institution: Universiti Teknologi Malaysia, Skudai, Malaysia
Name of Degree: *Bachelor of Science with Honors (Industrial Physics)*, 2006
Institution: Universiti Teknologi Malaysia, Skudai, Malaysia

Publications

International Journal

1. I.N. Sopian, **R. Hisam**, A.K. Yahya and M.I.M. Yusof 2018, *The influence of germanate anomaly on elastic moduli and Debye temperature behaviour of $x\text{Li}_2\text{O}-(100-x)[0.65\text{GeO}_2.0.35\text{PbO}]$ glass system*. Journal of Non-Crystalline Solids 493, 99-107.
2. C.N. Zainudin, **R.Hisam**, M.I.M. Yusof, A.K. Yahya and M.K. Halimah 2017, *Effect of increasing concentration of Na_2O on structural, elastic and optical properties of $(90-x)\text{GeO}_2-x\text{Na}_2\text{O}-10\text{PbO}$ glass system in the germanate anomaly region*. Material Research Express 4(10), 105204.
3. **Rosdiyana Hisam**, Ahmad Kamal Yahya, Halimah Mohamed Kamari and Zainal Abidin Talib 2017, *AC conductivity and dielectric behaviour in mixed electronic-ionic $30\text{Li}_2\text{O}-4\text{MoO}_3-(66-x)\text{TeO}_2-x\text{V}_2\text{O}_5$ glass system*. Ionics 23 (6) 1423-1437.
4. **R. Hisam** and A.K. Yahya, 2016, *Anomalous behaviors of elastic moduli, DC conductivity and optical properties in mixed transition-metal-ion $(20-x)\text{MnO}_2-x\text{Fe}_2\text{O}_3-80\text{TeO}_2$ tellurite glass system*. Chalcogenide Letters 13(4) 145-160.
5. **R. Hisam**, A.K. Yahya, H.M. Kamari, Z.A. Talib and R.H.Y. Subban 2016. *Anomalous dielectric constant and AC conductivity in mixed transition-metal-ion $x\text{Fe}_2\text{O}_3-(20-x)\text{MnO}_2-80\text{TeO}_2$ glass system*. Materials Express 6(2), 149-160.
6. S.A. Yaacob, A.K. Yahya, M.I.M. Yusof and **R.Hasham** 2012. *Effect of divalent ion substitution on oxygen sensing properties of hot-spot based $\text{Eu}_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ and $\text{Eu}_{1-y}\text{Mg}_y\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ ceramics*. Ceramics International 38(8), 6311-6319.
7. S.A. Yaacob, A.K. Yahya, M. Hassan and **R.Hasham** 2010. *Influence of intrinsic hole concentration on oxygen sensing properties of hot-spot based $\text{Eu}_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ ceramics*. AIP Conference Proceedings 1250, 313-316.

Conferences

1. **R.Hisam**, Dayana Said, Mas Fiza Mustafa and A.K. Yahya 2018. Seminar on Frontier Materials and Industrial Applications 2018 (SFMIA2018), Seminar Hall IBE UiTM, 4th September 2018.
2. **R. Hisam** and A.K. Yahya 2016. 29th Regional Conference on Solid State Science and Technology, KSL Hotel&Resort, Johor Bahru, Malaysia, 15 -17 November 2016.
3. **R. Hisam** and A.K. Yahya 2015. 5th International Conference on Solid State Science and Technology, Langkawi, Malaysia, 13 -15 December 2015.
4. **R. Hisam** S.A. Yaacob, and A.K. Yahya 2016. 26th Regional Conference on Solid State Science and Technology, The Royale Bintang Seremban, Negeri Sembilan, Malaysia, 22 -24 November 2011.

Research Funding

Internal funding

1. *AC Transport and Polarization Mechanism In The Mixed Ionic-Electronic Transition Region of $20\text{Li}_2\text{O}-x\text{Bi}_2\text{O}_3-(80-x)\text{TeO}_2$ Glass System for Electrolyte Application.*
UiTM Research Grant BESTARI, MYR 30,000.
1 July 2018 – 30 June 2020
Principle Researcher.
2. *Elastic and Optical Studies In The Mixed Ionic-Electronic Transition Region of $30\text{Li}_2\text{O}-4\text{MoO}_3-(66-x)\text{TeO}_2-x\text{V}_2\text{O}_5$ Tellurite Glass.*
UiTM Research Grant LESTARI, MYR 20,000.
1 July 2017 – 30 June 2019
Principle Researcher.
3. *Sol-Gel Processing of Nasicon-Structured Magnesium Stannum Phosphate Solid Electrolytes.*
UiTM Research Grant LESTARI, MYR 20,000.
1 July 2017 – 30 June 2019
Co Researcher.
4. *Influence of Size Disorder on Elastic Anomaly and The Dynamic-To-Static Jahn-Teller Transition in Charge-Ordered $\text{Nd}_{0.3}\text{LaO}_2\text{Ca}_{0.5-x}\text{Sr}_x\text{MnO}_3$ and $\text{Dy}_{0.5-x}\text{Er}_x\text{BaO}_{0.5}\text{CoO}_3$ Magnetic Ceramic Part 2.*
UiTM Excellent Fund, MYR 60,000
1 December 2013 – 30 November 2015
Co Researcher.
5. *Revival of Double-Exchange Mechanism in Charge-Ordered $\text{Bi}_{0.75}\text{Na}_{0.25}\text{MnO}_3$ And $\text{Bi}_{0.75}\text{Na}_{0.25}\text{Mn}_{0.99}\text{Ru}_{0.01}\text{O}_3$ Manganites By $\text{Ru}^{3+}/\text{Gd}^{3+}$ Substitutions.*
UiTM Excellent Fund, MYR 10,521
1 December 2012 – 30 November 2014
Co Researcher.
6. *Effects of Transition Metal Oxides on Network Formation And Elastic Properties of $80\text{TeO}_2-(20-x)\text{ZnO}-x\text{Fe}_2\text{O}_3$ And $(80-x)\text{TeO}_2-20\text{PbO}-x\text{WO}_3$ Tellurite Glass Systems.*
UiTM Excellent Fund, MYR 15,721
1 September 2012 – 31 August 2014
Co Researcher.
7. *Effect Of Elemental Substitutions On Oxygen Sensing Properties Of Hot-Spot Based $(\text{Eu}_{1-x}\text{M}_x)\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ ($\text{M}=\text{Ca}, \text{Mg}$) Ceramics.*
UiTM Excellent Fund, MYR 10,000
1 January 2010 – 31 August 2011
Principle Researcher.

National funding

1. *Elastic Nature and Dielectric Relaxation Mechanism of $x\text{SrO}-10\text{PbO}-(90-x)\text{B}_2\text{O}_3$ Glasses In The Borate Anomaly Region.*
Research Development Grant Scheme (RAGS)
Ministry of Education Malaysia, MYR 48,000.
1 December 2015 – 30 May 2018
Co Researcher.
2. *Elastic Nature and Dielectric Properties of $x\text{BaO}-30\text{Li}_2\text{O}-(60-x)\text{B}_2\text{O}_3$ Glasses In The Borate Anomaly Region.*
Research Development Grant Scheme (RAGS)
Ministry of Education Malaysia, MYR 80,000.
1 December 2014 – 30 May 2017
Co Researcher.
3. *Dielectric Behaviour in The Conductivity Anomaly Region of Doped Tellurium Oxide Glasses*
Fundamental Research Grant Scheme (FRGS)
Ministry of Education Malaysia, MYR 71,000.
1 July 2014 – 30 June 2017
Co Researcher.
4. *Elastic Properties of Doped $\text{LiO}-\text{PbO}-\text{GeO}$ Amorphous Oxide in The Germanate-Anomaly Region.*
Research Acculturation Collaborative Effort (RACE)
Ministry of Education Malaysia, MYR 50,000.
15 January 2014 – 15 July 2016
Co Researcher.
5. *Influence of Size Disorder on Elastic Anomaly and The Dynamic-To-Static Jahn-Teller Transition in Charge-Ordered $\text{Nd}_{0.3}\text{LaO}_2\text{Ca}_{0.5-x}\text{Sr}_x\text{MnO}_3$ and $\text{Dy}_{0.5-x}\text{Er}_x\text{BaO}_{0.5}\text{CoO}_3$ Magnetic Ceramic.*
Research Development Grant Scheme (RAGS)
Ministry of Education Malaysia, MYR 80,000.
15 December 2012 – 14 June 2014
Co Researcher.
6. *Influence of Concurrent Superconducting Fluctuation Transition and Oxygen Ordering on Electron-Phonon Binding Energy in Re123 Superconductors.*
Fundamental Research Grant Scheme (FRGS)
Ministry of Education Malaysia, MYR 82,000.
1 March 2010 – 2 January 2013
Principle Researcher.
7. *Unit Cell Parameter, Cation Position and Oxygen Site Occupancy Factor of Fexoy And Fexalzoxy Nanomaterials Prepared by Combustion Method.*
Fundamental Research Grant Scheme (FRGS)
Ministry of Education Malaysia, MYR 65,000.
1 March 2010 – 23 April 2013
Co Researcher.

8. *Conductivity Studies of Novel Acyclic Schiff Bases and Their Metal Complexes.*
Fundamental Research Grant Scheme (FRGS)
Ministry of Education Malaysia, MYR 51,200.
1 March 2010 – 28 February 2012
Co Researcher.

Awards and Recognition

1. Best of Ranking Champion 2018 Award, Institute of Quality and Knowledge Advancement, Universiti Teknologi MARA, 2018.
2. Excellence Research Award, UiTM 87th Convocation Ceremony 2017.
3. Best Thesis Award, Malam Anugerah Pascasiswazah (MAP) 2017, Faculty of Applied Sciences, Universiti Teknologi MARA, 2017.
4. Graduate On Time (GOT) Award, Malam Anugerah Pascasiswazah (MAP) 2017, Faculty of Applied Sciences, Universiti Teknologi MARA, 2017.
5. Excellence Service Award, Universiti Teknologi MARA, 2011.

Innovation Awards

1. Ion Conducting Boro-Tellurite Glass Materials: Application to Solid State Devices (**Gold Medal**).
International Invention, Innovation & Design 2018 (IID 2018), 18 April 2018, Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Seremban, Malaysia.
2. Simple Oxygen Sensor Using Self-Heating Ceramics Rods (**Silver Medal**).
Invention, Innovation, Design & Expo 2013 (IIDEX 2013), 15-17 March 2013, Dewan Agong Tuanku Canselor (DATC), Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia.
3. Ca-stabilized Eu 123 Oxygen Sensor Rods (**Bronze Medal**).
Invention, Innovation & Design 2010- Special Edition (IID 2010 SE), 12-14 October 2010, Dewan Sri Budiman & Annex, Universiti Teknologi MARA, Shah Alam, Selangor, Malaysia.

Consultancy

1. Kursus Bidang Kepakaran Bahan Komponen Perabot (Polimer/Tekstil/Kaca/Logam) for Forest Research Institute of Malaysia (FRIM), 2018.

Professional Membership

1. Life Member of The Malaysian Solid State Science & Technology Society (MASS)

2. Life Member of Asia Pacific Network for Sustainable Agriculture, Food and Energy (SAFE)
3. Research Initiative Group; Ultrasonic od Novel Metals and Oxides Research Group (UNMOX) - University

Field of Expertise

Oxide Glasses and Advanced Materials.