



DR. LILIA ELLANY

BINTI MOHTAR

Responsible, Execution & Creative

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MY INFORMATION

Full Name : Lilia Ellany binti Mohtar
Nationality : Malaysian
Age : 34 years old
Position : Senior Lecturer
Address :
Physics Department,
Faculty of Science & Mathematics,
Sultan Sultan Idris Education
University,
Kampus Sultan Azlan Shah,
Proton City, 35900 Tanjong Malim,
Perak.

EDUCATION

Doctor of Philosophy (Science (Physics) Education)

- Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia
- Graduated 2019

Master of Education (Physics Education)

- Universiti Teknologi Malaysia, Skudai, Johor, Malaysia
- Graduated 2012

Bachelor of Science with Education (Physics)

- Universiti Teknologi Malaysia, Skudai, Johor, Malaysia
- Graduated 2010

EXPERTISE

- Physics Education (Teaching & Learning)
- Structural Equation Modeling (SEM-AMOS) Analysis
- STEM Education

WEBSITE & SOCIAL LINK

Scopus Account:

<https://www.scopus.com/authid/detail.uri?authorId=42861937900> (ID: 42861937900)

Google Scholar:

<https://scholar.google.com/citations?user=UaNE9EgAAAAJ&hl=en> (ID: UaNE9EgAAAAJ&hl)

ResearchGate:

<https://www.researchgate.net/profile/Lilia-Mohtar>

RESEARCH GRANT

- Geran Galakan Penyelidikan Universiti (GGPU) 2021 (Aug 2021 – July 2023) – Project Leader**
Topic: Pembangunan Modul Reka Bentuk Rancangan Aktiviti Pengintegrasian STEM Secara Dalam Talian untuk KSSM Fizik Tingkatan Empat Dan Keberkesanannya Dalam Kalangan Guru
- Geran Penyelidikan Kurikulum Pendekatan Neoterik (GPKPN) 2020 – 2022 - Member**
Topic: Pembangunan Dokumen Standard Kurikulum Pendekatan Neoterik dan modul pembelajaran untuk kluster perkembangan manusia bagi Tahap Satu
- Geran Penyelidikan Universiti Berteraskan Pendidikan (GPUBP) 2020 – 2022 - Member**
Topic: Pembangunan dan Keberkesanan Modul Kendiri Pembelajaran Kinematik dalam Kalangan Pelajar Sekolah Menengah

List of Publication

Book

Mohamad Bilal Ali, Zainal Abidin Zainuddin, Zaidatun Tasir, Yusof Boon, Fatin Aliah Phang., Lilia Ellany Mohtar, Chuzairy Hanri & Syahrudaman Kamarudin (2010). Proceeding Education Postgraduate Research Seminar 2010. Skudai: Faculty of Education, Universiti Teknologi Malaysia.

Book Chapter

Lilia Ellany Mohtar, Lilia Halim & Zanaton H. Iksan. (2018). Konstruksi Kreativitas Saintifik Bagi Kajian Dalam Pendidikan Fizik Sekolah Menengah: Satu Sorotan Literatur. In Nur Jahan & Sazali (Ed.). (pp. 1-23). Gelugor, Pulau Pinang: Unit Penerbitan SEAMEO RECSAM.

Mohd Norawi Ali, Lilia Halim, Kamisah Osman & Lilia Ellany Mohtar. (2017). The Integration of Fund of Knowledge in the Hybridization Cognitive Strategy to Enhance Secondary Students' Understanding of Physics Optical Concepts and Remediating Their Misconceptions. In: Karpudewan M., Md Zain A., Chandrasegaran A. (eds) Overcoming Students' Misconceptions in Science. Springer, Singapore (SCOPUS INDEXED)

Articles (2021 – 2015)

Ahmad Muhlisin, Siswanto, Suwito Singgih, Nuryunita Dewantari, Lilia Ellany Mohtar. (2020). Integration PBL with RMS: Improving problem solving skills on environmental education. *Biosfer: Jurnal Pendidikan Biologi*, 13(2), 155-166.

Haryati Kamarrudina, Lilia Halim, Lilia Ellany Mohtar. (2020). Sumbangan Penguasaan Asas Fizik Dan Matematik Terhadap Keupayaan Pengaplikasian Fizik Bagi Topik Mekanik Tingkatan Enam. *Jurnal Fizik Malaysia*, 41(1), 10037-10050. (ESCI INDEXED)

Lilia Ellany Mohtar, Norshariani Abd Rahman, Siti Mistima Maat, Zanaton H. Iksan, Kamisah Othman & Lilia Halim. (2019). A Model of Interest in STEM Careers among Secondary School Students. *Journal of Baltic Science Education*, 18(3), 404-416. (ISI INDEXED)

Lilia Ellany Mohtar, Lilia Halim, Mohd. Ali Samsudin & Mohd. Erfy Ismail (2019). Non-Cognitive Factors Influencing Science Achievement in Malaysia and Japan: An Analysis of TIMSS 2015. *Eurasia Journal of Mathematics, Science and Technology Education*, 15(4), em1697. <https://doi.org/10.29333/ejmste/103567>. (SCOPUS INDEXED)

Norshariani Abd Rahman, Lilia Ellany Mohtar, Nor Aidillina Mohd Ramli, Mohamad Sahari Nordin & Lilia Halim. (2019). STEM Career Interest: The Moderating Effect of Gender. *International Journal of Educational Research*. (In Revision) (SCOPUS INDEXED)

Lilia Halim, Norshariani Abd Rahman, Noorzaila Wahab & Lilia Ellany Mohtar. (2018). Factors influencing interest in STEM careers: An exploratory factor analysis. *Asia-Pacific Forum on Science Learning and Teaching*, 19(2), Article 1, Dec., 2018. (SCOPUS INDEXED)

Lilia Halim, Norshariani Abd Rahman, Zamri, R. & Lilia Ellany Mohtar. (2018). The roles of parents in cultivating children's interest towards science learning and careers. *Kasetsart Journal of Social Sciences*, 39(2), 190-196. (SCOPUS INDEXED)

Muhammad Syukri, Lilia Halim, Lilia Ellany Mohtar & Soewarno, S. (2018). The Impact of Engineering Design Process in Teaching and Learning to Enhance Students' Science Problem-Solving Skills. *Jurnal Pendidikan IPA Indonesia*, 7(1), 66-75. (SCOPUS INDEXED)

Muhammad Syukri, Lilia Halim & Lilia Ellany Mohtar. (2017). Engineering Design Process: Cultivating Creativity Skills through Development of Science Technical Product. *Jurnal Fizik Malaysia*, 38(1): 10055-1065. (ESCI INDEXED).

Lilia Ellany Mohtar, Lilia Halim & Seth Sulaiman. (2015). Dependence on Creativity Characteristics as Observed during the Implementation of Laboratory Activities. *Creative Education*, 6, 1168-1177. doi: 10.4236/ce.2015.611115. (ERA)

Conference Paper (2021 – 2015)

- Lilia Ellany Mohtar, Lilia Halim, Siti Nursaila Alias, Anis Nazihah Mat Daud, and Muhammad Syukri. (2021) Contribution of Scientific Creativity and Affective Factors towards Students' Physics Achievement: A Structural Equation Modeling Analysis. ICSTEM & IPCSM 2021, 7 AUGUST 2021, Sultan Idris Education University.
- Lilia Halim, Norshariani Abd Rahman, Ramli, N. A. M., & Lilia Ellany Mohtar. (2018, January). Influence of students' STEM self-efficacy on STEM and physics career choice. In AIP Conference Proceedings 1923(1) p. 020001). AIP Publishing. (ISI INDEXED)
- Muhammad Abd Hadi, Lilia Halim, Lilia Ellany Mohtar & Nur Jahan. (2017). Science Education Research Trends In Malaysia: A Content Analysis. European Science Education Research Association (ESERA) 2017 Conference Dublin City University, Dublin Ireland. 21st-25th August 2017. doi: 10.13140/RG.2.2.16149.52963
- Lilia Ellany Mohtar, Lilia Halim & Zanaton H. Iksan (2016). Picture-Type Creativity: General Findings among Form Four Science student in Malaysia. 4th International Conference on ASEAN Comparative Education Research Network (ACERN 2016). Grand Inna Muara Hotel, Padang, West Sumatera. 30-1 Dec 2016.
- Lilia Ellany Mohtar, Lilia Halim & Zanaton H. Iksan (2016). Cognitive, Affective and Students' Achievement in Physics: A Hypothetical Model for Structural Equation Modeling Testing. 4th International Conference on ASEAN Comparative Education Research Network (ACERN 2016). Grand Inna Muara Hotel, Padang, West Sumatera. 30-1 Dec 2016.
- Lilia Halim & Lilia Ellany Mohtar. (2015). Critical Thinking Process in Science Learning. Seminar Nasional Pendidikan Sains V. Magister Pendidikan Sains dan Doktor Pendidikan IPA FKIP UNS Surakarta, 19 November 2015. ISSN: 2407-4659.

Thesis

- i. Ph.D (Physics Education)
Model Kreativiti, Sikap, Efikasi Kendiri Dan Motivasi Terhadap Pencapaian Fizik Pelajar Tingkatan Empat (2019)
- ii. Master Degree (Physics Education)
Ciri-Ciri Kreativiti Bakal Guru Fizik Dalam Latihan Amali Fizik Dan Projek Inovasi Fizik (2012)
- iii. Bachelor Degree of Science & Education (Physics)
Tahap Kefahaman Konsep - Konsep Fizik KBSM Dalam Kalangan Pelajar Pendidikan Fizik Tahun Akhir (2010)

Grant/Project (as a research assistant)

- i. Pembangunan dan Keberkesanan Modul Kendiri Pembelajaran Kinematik dalam Kalangan Pelajar Sekolah Menengah (Dana Geran Pendidikan Universiti 2020) - UPSI
- ii. Environmental and Personal Factors as Predictors to Interest in STEM Careers (Dana Penyelidikan FPEND 1 2016-2018) – UKM
- iii. Validation of STEM Career Models among Students and Intervention Forms to Improving STEM Career Selection (Project Code: AP-2015-001) – UKM
- iv. Longitudinal Study on Students' Interest in STEM, STEM Career Aspirations, 21st-century skills among students following the STEM BITARA program (Project Code: STEM-2014-004) – UKM
- v. Students' and Teachers' Epistemological Beliefs In Learning And Teaching Science As Predictors Of Students' Tendency Towards Enrolling Science Stream granted by Research University Grant (UTM). Vot: 02J97 (2012) – UTM
- vi. Integrating Engineering Elements in Science and Mathematics Education granted by Fundamental Research Grant Scheme (FRGS). Vot: 78652 (2012) – UTM
- vii. Comprehensive Indicators of Mathematics and Science Understanding Among Secondary School Students granted by Research University Grant (UTM) Vot: 78512 (2012) – UTM
- viii. Status of Science and Mathematics Education in Malaysia granted by Fundamental Research Grant Scheme (FRGS). Vot: 73752 (2011) – UTM
- ix. Hala Tuju Bagi Program Pendidikan IPTA Malaysia (Penempatan Guru) granted by Research University Grant (2010) – UTM

References

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