



## PERSONAL DETAILS

**Name** : Dr Corrienna Abdul Talib  
**Gender** : Female  
**Nationality** : Malaysian  
**Marital Status** : Married  
**Permanent Address** : No 27 Jalan Emas 27, Taman Sri Putri, 81310 Skudai, Johor  
**Correspondent Address** : Department of Educational Science, Mathematics and Creative Multimedia, School of Education, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 Skudai, Johor.  
**Tel** : 0143463760  
**E-mail** : corrienna@utm.my  
**Website** : <https://people.utm.my/corrienna/>  
**Expertise** : Chemistry/ Science education; STEM/STEAM, computational thinking, IBSE, design thinking, technology enhanced learning, green chemistry, assessment, learning environment, thinking skills  
**H-Index (WOS)** : 4  
**H-Index (SCOPUS)** : 4  
**H-Index (G. Scholar)** : 11  
**H-Index (Researchgate)** : 8

## ACADEMIC QUALIFICATIONS

NO	LEVEL OF EDUCATION	COURSE	UNIVERSITY	STARTING DATE	ENDING DATE
1	Doctor of Philosophy	Science Education (Chemistry)	Universiti Sains Malaysia (USM)	12 July 2010	27 March 2014
2	Master of Education	Science Education (Chemistry)	Universiti Sains Malaysia (USM)	9 July 2005	16 July 2007
3	Diploma in Education	Science Education (Pure Sciences)	Institut Pendidikan Guru Kampus Pulau Pinang (IPGKPP)	5 June 1999	5 June 2000
4	Degree of Veterinary Medicine	Veterinary Medicine	Universiti Putra Malaysia (UPM)	16 July 1993	25 July 1998

## AWARD AND HONORS RECEIVED

Summary	
International Awards/Honors	25
National Awards/Honors	11

UTM Awards/Honors	36
Faculty Awards/Honors	21

### Award And Honors

NO	AWARD	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	YEAR
		<b>INTERNATIONAL</b>	
1.	Top 20 in the Heritage Immortalised Minecraft Championship 2022 Super Senior Category	SMK Yok Bin & JPNM	2022
2.	Enthusiast Award in the Heritage Immortalised: A Nation Building Minecraft Championship 2021 Super Senior Category	SMK Yok Bin & UTEM	2021
		<b>NATIONAL</b>	
1.	Top 16 startups in the MYStartup Pre-Accelerator Programme Cohort 2, 16 February 2023	Cradle Fund SDN BHD	2023
2.	Top 40 startups in the MYStartup Pre-Accelerator Programme Cohort 2, 7 October 2022	Cradle Fund SDN BHD	2022
3.	Letter of Appreciation from Officer in Charge of Police District (OCPD), Taiping, Perak for outstanding service in the District Police Cadet	Ibu Pejabat Polis Taiping, Perak	2011
4.	Third Place for Champion of the Excellence Senior Police Cadet Perak State level	Perak Contingent Police Headquarters	2010
5.	Overall Champion Shooting Team Perak State Level	Perak Contingent Police Headquarters	2009
6.	Second place in Silat (Martial Art) Competition among the Malaysian Institutions of Higher Learning (IPT)	Universiti Kebangsaan Malaysia	1995
		<b>UTM</b>	
1.	First Place for Highest Points Collected Individual Categories Award	Town Hall: UTM enVision 2025, 13 December 2020	2020
2.	Excellent Service Award 2019 at the Citra Karisma Universiti Teknologi Malaysia, Dewan Sultan Iskandar, 24 August 2020	CITRA KARISMA	2020
		<b>FACULTY</b>	
1.	Excellent Service Award 2021 at the Appreciation Ceremony of Faculty of Social Sciences and Humanities, 24 August 2022	Faculty of Social Sciences and Humanities (FSSH)	2022
2.	Excellent Service Award 2020 at the Online Appreciation Ceremony of Faculty of Social Sciences and Humanities 2021, 7 October 2021	FSSH	2021
3.	Excellent Service Award 2019 at the Appreciation Ceremony of Faculty of Social Sciences and Humanities 2020, 15 December 2020	FSSH	2020
4.	Finalist For Original Publication Of the Popular Publication Award Categories 2019 at the Appreciation Ceremony of Faculty of Social Sciences and Humanities 2020, 15 December 2020	FSSH	2020
5.	Excellent Service Award 2018 at the Appreciation Ceremony of Faculty of Social Sciences and Humanities, Dewan Sultan Iskandar, 1 July 2019	FSSH	2019
6.	Industrial Partnership Award 2018 at the Appreciation Ceremony of Faculty of Social Sciences and Humanities,	FSSH	2019

Dewan Sultan Iskandar, 1 July 2019		
------------------------------------	--	--

## RESEARCH AWARD

NO	AWARD	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	YEAR
<b>INTERNATIONAL</b>			
1.	Gold Award winning project entitled Get HOTs with MYGAMBOT, UTM: PRGS-KPT grant project (Project Leader)	New Academia Learning Innovation (NALI) 2022 Exhibition & Competition for the innovation, 4-6 October 2022	2022
2.	Best Paper Award for project entitled Solving Coastal Pollution to Achieve Sustainable Development Goal: A Plastic Debris Case (Project Leader)	6th International Conference on Management, Engineering, Science, Social Science, and Humanities, Society For Research Development, 10 November 2021	2021
3.	SATU Joint Research Scheme (JRS) Co-Pi Award 2021 for research entitled School-based Integrated Approach in Reducing Obesity with Universitas Airlangga, Indonesia (Project Co-Principal Investigator)	SATU Presidents' Forum International Secretariat, National Cheng Kung University, Taiwan 20 May 2021	2021
4.	Gold Award winning project entitled Scratchtopia Challenge: From Science Experiment to Coding (Project Leader)	NALI 2020 Exhibition & Competition, 7-10 December 2020	2020
5.	Bronze Award winning project entitled Active Online Learning Through Whatsapp (Project team members)	NALI 2020 Exhibition & Competition, 7-10 December 2020, UTM	2020
6.	Best Paper Award for research entitled Integration of Robotics into STEM Education for Facilitating Environmental Sustainability (Project Leader)	5 <sup>th</sup> the International Conference on Management, Engineering, Science, Social Science and Humanities, SEAMEO RECSAM, Penang, Malaysia, 14-15 August 2020	2020
7.	SATU Joint Research Scheme (JRS) Co-Pi Award 2020 for research entitled Halal industries in Taiwan: Problems and Challenges with Universiti Kebangsaan Malaysia (Project Co-Principal Investigator)	SATU Presidents' Forum International Secretariat. National Cheng Kung University, Taiwan, 21 May 2020	2020
8.	Gold Award for Project entitled EZ-Porg: An Easy Color Schematic Model For Programming Problem Solving (Project team members)	Teaching and Learning Congress & Innovation Competition (kInovasi 2020), UKM, Hotel Tenera Bangi, Selangor, 5-6 February 2020	2020
9.	Finalist Certificate Award (Project team members)	NALI 2019 Exhibition & Competition, Faculty of Built Environment and Surveying, UTM, 18 September 2019	2019

10.	Silver Award Winning Project entitled Visible the Invisible: An Opportunity for Experiential Learning to Nurture Graduate Success Attributes (Project Leader)	NALI 2019 Exhibition & Competition, Faculty of Built Environment and Surveying, UTM, 18 September 2019	2019
11.	Bronze Award Winning Project entitled Teaching Graduate Success Attribute (UHAK1012) by Using Service Learning Approach (Project team members)	NALI 2019 Exhibition & Competition, Faculty of Built Environment and Surveying, UTM, 18 September 2019	2019
12.	Silver Award Winning Project entitled Visible the Invisible-A Project to End Homeless (Project Leader)	UTM Grand Challenges, 29-31 October 2018	2018
13.	Silver Award Winning Project entitled STEM interest-ignition program by school of education UTM and Sultan Ismail Library Kg Melayu (Project team members)	NALI 2018 Exhibition & Competition, UTM, 25-26 September 2018	2018
14.	Silver Award Winning Project entitled Innovative teaching and learning strategies in open modelling and simulation environment for student-centred engineering education (Project team members)	NALI 2018 Exhibition & Competition, UTM, 25-26 September 2018	2018
15.	Bronze Award Winning Project entitled An evaluation on students perspective towards Kelab Suka Belajar UTM (Project team members)	NALI 2018 Exhibition & Competition, UTM, 25-26 September 2018	2018
16.	Participatory Award for project entitled What-How-Why: a Framework For Thinking and Direction for Learning Through Learner-Generated Questions to Enhance Teachers and Students Critical Thinking (Project leader)	3 <sup>rd</sup> International Innovative Practices in Higher Education EXPO 2016 (I-PHEX2016) CEE UTM KL, 9-10 August 2016	2016
17.	Bronze Award Winning Project entitled LESMAT: A Sustainable E-Paltform For Learning Science And Mathematics Together In The Borderless World (Project team members)	Innovative Practices in Education and Industry Exhibition (I-PEINX 2016), Dewan Sultan Iskandar, UTM, 14 March 2016	2016
18.	Silver Award Winning Project for project entitled G-CTEAM (Graphic Calculator Integration In Chemistry, Technology, Engineering, Arts & Mathematics) (Project leader)	Innovative Practices in Education and Industry Exhibition (I-PEINX 2016), Dewan Sultan Iskandar, UTM, 14 March 2016	2016
19.	Silver Award Winning Project entitled Development Of A Model To Promote Values-Based Environmental Economy, Mathematics And Science/Social Sciene (VEMS) Education Among Youths For Financial Management Incorporating Islamic Values (Project team members)	International Exposition on Syariah compliat idea, invention, innovation and design (ISCIID) UiTM Shah Alam, 26-27 November 2014	2014
20.	Best Poster Award for project entitled Building Sustainable Campus With Creative Minds THorough Networking and Human Resource Development (Project team members)	1st Regional Coference On Campus Sustainabliigy, Universiti Malaysia Sabah 7-9 April 2014	2014
<b>NATIONAL</b>			

1.	Gold Award Winning Project entitled STEM Outreach Program (Project team members)	1st National Conference on SULAM 2021, Ministry of Higher Education & UTM, 22 - 25 October 2021	2021
2.	Participation Award project entitled Three-Dimensional Visualization To Improve Students' Spatial Visualization Skills Certificate of Participation (Project team members)	1st National Conference on SULAM 2021, Ministry of Higher Education & UTM, 22 - 25 October 2021	2021
3.	Awarded Research University Postgraduate Research Grant Scheme (USM-RU-PRGS) by Institute of Postgraduate Studies, University Science Malaysia (1 July 2010 – 30 June 2012) for research entitled The Effect of Process Oriented Guided-Inquiry Learning on Students Scientific Inquiry Literacy Skills and Achievement in Secondary School Chemistry	USM	2012
4.	Best Field Writing Report Award, DVM December 1995/96, Universiti Putra Malaysia, Malaysia	UPM	1996
<b>UTM</b>			
1.	Three Star Rating Award for KTP-NMG 2019 Research Project entitled GAMBOT: Educational Game Mobile Robot For Promoting Hypothetico-Creative Reasoning Among Students (Project Leader)	UTM Centre For Community & Industry Netwok (CCIN) 6 July 2020	2020
2.	Five Star Rating Award for KTP-NMG 2019 Research Project entitled Transfer Knowledge of Computational Thinking Skills among Underprevidged Students (Project Leader)	UTM CCIN 16 January 2020	2020
3.	Champion Award at the UTM Grand Challenges 2019 for project entitled Homeless Management Information System (HOMIE) (Project Leader/ Advisor)	3 <sup>rd</sup> Undergraduate Research Conference, Senate Hall, 23 December 2019	2019
4.	Gold Award Winning Project 'Saroong Dry Shampoo (Project advisor)	Sustainable Entrepreneurial Showcase 2019, UTMXCITE, 3 December 2019	2019
5.	Participatory Award for project entitled Oxygen (Project advisor)	UTM Edutainment Development Competition, UTM, 30 April 2016	2016
<b>FACULTY</b>			
1.	Gold Award Winning Project entitled Aplikasi AR Geometri 3D (Project advisor)	15th Innovation Day, Faculty of Social Sciences and Humanities, UTM, Johor, 29 June 2022	2022
2.	Gold Award Winning Project entitled Gold Algrebra Wonderland App (Project advisor)	15th Innovation Day, Faculty of Social Sciences and Humanities, UTM, Johor, 29 June 2022	2022
3.	Gold Award Winning Project entitled i@10 Access Card (Project advisor)	15th Innovation Day, Faculty of Social Sciences and Humanities, UTM, Johor, 29 June 2022	2022
4.	Gold Award Winning Project entitled Polboard Kit (Project advisor)	14th Innovation Day, Faculty of Social Sciences and Humanities, UTM, Johor	2022

		31 January 2022	
5.	Silver Award Winning Project entitled Attact box(Project advisor)	14th Innovation Day, Faculty of Social Sciences and Humanities, UTM, Johor, 31 January 2022	2022
6.	Industrial Partnership Award	FSSH Award of Excellence and Appreciation, Dewan Sultan Iskandar, UTM, 1 July 2019	2019
7.	Gold Award Winning Project entitled Mobile application apps guidelines for educator in teaching and learning technology (Project advisor)	5 <sup>th</sup> Innovation Day Faculty of Social Sciences and Humanities, UTM, Johor	2017
8.	Silver Award Winning Project entitled Chemistry's Formula Reader for Newbie (Project advisor)	5 <sup>th</sup> Innovation Day Faculty of Social Sciences and Humanities, UTM, Johor	2017
9.	Silver Award Winning Project entitled Kit 1-2-4-6 (Project advisor)	5 <sup>th</sup> Innovation Day Faculty of Social Sciences and Humanities, UTM, Johor	2017
10.	Bronze Award Winning Project Heredity and variation on hand tool kit (Project advisor)	5 <sup>th</sup> Innovation Day Faculty of Social Sciences and Humanities, UTM, Johor	2017
11.	Silver Award Winning Project entitled Science In Action (Project advisor)	4th Innovation Day Faculty of Social Sciences and Humanities, UTM, Johor, 8 December 2016	2016
12.	Gold Award Winning Project entitled Cash And Crash (Project advisor)	4th Innovation Day Faculty of Social Sciences and Humanities, Dewan Astana & Centre of Student Innovation, UTM, Johor, 8 December 2016	2016
13.	Awarded Research University Postgraduate Research Grant Scheme (USM-RU-PRGS) by Institute of Postgraduate Studies, University Science Malaysia (1 July 2010 – 30 June 2012) for research entitled The Effect of Process Oriented Guided-Inquiry Learning on Students Scientific Inquiry Literacy Skills and Achievement in Secondary School Chemistry	NATIONAL PPIP USM	2012
14.	Best Field Writing Report Award, DVM December 1995/96, Universiti Putra Malaysia, Malaysia	Universiti Putra Malaysia	1996

#### TEACHING AWARD

NO	AWARD	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	YEAR
<b>INTERNATIONAL</b>			

1.	Best Paper Award for research entitled Measuring critical thinking in science: systematic review (Project advisor)	4 <sup>th</sup> International Education Postgraduate Seminar, 10-11 December 2017	2017
2.	Bronze Award Winning Project entitled Developing aspiring educators: an innovation course framework (Project advisor)	4 <sup>th</sup> International Innovative Practices in Higher Education Expo 2017, Kuala Lumpur	2017
3.	Silver Award Winning Project entitled All in One Geometry Kit (Project advisor)	3 <sup>rd</sup> International Innovation, Design, and Articulation, UITM Perlis, 27-29 April 2016	2016
<b>NATIONAL</b>			
1.	Champion in the category of the innovative curriculum program for the Minister of Higher Education Special Award, 2 September 2022 (ODL course lecturer)	Anugerah Khas YB Menteri Pengajian Tinggi: Rekabentuk Kurikulum Dan Penyampaian Inovatif (AKRI)	2022
<b>UTM</b>			
1	Award of Excellence for Active Blended Learning Course: Sciences And Mathematics Learning SHPN1022-03, Sem 1 - 2022/2023	UTM UTM Center For Advancement in Digital and Flexible Learning (CDEX)	2023
2.	Award of Excellence for Active Blended Learning Course: Current Issues in Chemistry Education MPPK1333-01, Sem 2-2021/2022	UTM CDEX	2022
3.	Award of Excellence for Active Blended Learning Course: Current Issues in Chemistry Education MHPK2233-01, Sem 2-2021/2022	UTM CDEX	2022
4.	Award of Excellence for Active Blended Learning Course: Innovations in Learning and Teaching MHPU1013-03, Sem 1-2021/2022	UTM CDEX	2022
5.	Award of Excellence for Active Blended Learning Course: Innovations in Learning and Teaching MPPU1003-03, Sem 1-2021/2022	UTM CDEX	2022
6.	Award of Excellence for Active Blended Learning Course: Testing And Evaluation In Science Education, MPPS1203-01, Sem 1-2021/2022	UTM CDEX	2022
7.	Silver Award winning project entitled DLab Kit: Individualized Laboratory approach for the forgotten community (Project advisor)	Sustainable & Integrated Engineering Student Research e-Poster Competition, Marine Engineering & Naval Architecture Technical Division (MNATD), Institution of Engineers, Malaysia (IEM), 5 Jun 2021	2021
8.	Bronze Award winning project entitled MYNANORIA: The self-exploration on nano drugs targeting for cancer therapy mobile application module (Project advisor)	Sustainable & Integrated Engineering Student Research e-Poster Competition, Marine Engineering & Naval Architecture Technical Division (MNATD), Institution of Engineers, Malaysia (IEM), 5 Jun 2021	2021
9.	Top 10 Finalist for Innovation Project (Project advisor)	Sustainable & Integrated Engineering Student Research e-Poster Competition, Marine	2021

		Engineering & Naval Architecture Technical Division (MNATD), Institution of Engineers, Malaysia (IEM), 28 May 2021	
10.	Best Advisor Award at the Sustainable Entrepreneurial Mindset Showcase (SEMS 4.0) UTM XCITE, 11 January 2021	UTM Centre For Student Innovation And Technology Entrepreneurship (XCITE)	2021
11.	Award of Excellence for Active Blended Learning Course: Technology In Chemistry Education MPPK1343-01 Sem 2 - 2020/2021	UTM XCITE	2021
12.	Award of Excellence for Active Blended Learning Course: Introduction To Entrepreneurship UHAK1032-22 Sem 1 - 2020/2021	UTM CDEX	2021
13.	Award of Excellence for Active Blended Learning Course: Graduate Success Attributes UHMT1012-48 Sem 1 - 2020/2021	UTM CDEX	2021
14.	Top 10 Finalist for Innovative Projects (Project Advisor)	Sustainable Entrepreneurial Mindset Showcase (SEMS 4.0) UTM XCITE, 29 December 2020	2020
15.	Award of Excellence for Active Blended Learning Course: Current Issues in Chemistry Education MPPK1333, Sem 2-2019/2020	UTM CDEX	2020
16.	Award of Excellence for Active Blended Learning Course: Graduate Success Attributes UHAK1012-15, Sem 2-2019/2020	UTM CDEX	2020
17.	Award of Excellence for Active Blended Learning Course: Critical and Creative Thinking UHAS122-01, Sem 2-2019/2020	UTM CDEX	2020
18.	Award of Excellence for Active Blended Learning Course: Introduction to Entrepreneurship UHAK1032-24, Sem 1-2019/2020	UTM CDEX	2020
19.	Award of Excellence for Active Blended Learning Course: Introduction to Entrepreneurship UHAK1032-41, Sem 1-2019/2020	UTM CDEX	2020
20.	Award of Excellence for Active Blended Learning Course: Graduate Success Attributes UHMT1012-49, Sem 1-2019/2020	UTM CDEX	2020
21.	Award of Excellence for Active Blended Learning Course: Testing and Evaluation in Science Education MPPS1203, Sem 1-2019/2020	UTM CDEX	2020
22.	Award of Excellence, Active Blended Learning Course: MPPK1343-01 Technology in Chemistry Education, Sem 2 2018/2019.	UTM CDEX	2019
23.	Award of Excellence, Active Blended Learning Course: UICL 2302-28 Thinking of Science and Technology, Sem 2 2018/2019.	UTM CDEX	2019
24.	Award of Excellence, Active Blended Learning Course: Models of Teaching and Learning in Chemistry, Sem 1 2017/2018.	UTM CDEX	2018
25.	Award of Excellence, Active Blended Learning Course: Innovations in Learning and Teaching, Sem 1 2017/2018.	UTM CDEX	2018
26.	Award of Excellence, Active blended learning course: Thinking skills in chemistry education, UTM, Sem 2 2016/2017.	UTM CDEX	2017

27.	Award of Excellence, Active blended learning course: Technology in chemistry education, UTM, Sem 2 2016/2017.	UTM CDEX	2017
28.	Award of Excellence, Active blended learning course: Testing and evaluation in science education, UTM, Sem 2 2016/2017.	UTM CDEX	2017
29.	Award of Excellence, Active blended learning course: Innovations in learning and teaching, UTM, Sem 2 2016/2017.	UTM CDEX	2017
<b>FACULTY</b>			
1.	Finalist For Teaching Award 2019 at the Appreciation Ceremony of Faculty of Social Sciences and Humanities 2020, 15 December 2020	FSSH	2020

### WORKING EXPERIENCE

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT/ORGANISATION
1.	Senior Lecturer	24/05/2015	Present	UTM, Skudai, Johor
2.	Science Education Specialist	1/11/2011	23/5/2015	SEAMEO RECSAM, Pulau Pinang
3.	Science/ Chemistry Teacher	16/1/2011	30/10/2011	SMK Tengku Menteri, Perak
4.	Science/ Chemistry Teacher	3/7/2000	15/1/2011	SMK Tat Beng, Perak

### PROFESSIONAL MEMBERSHIP / QUALIFICATIONS / RECOGNITION

Summary	
International Professional Membership / Qualifications / Recognition	4
National Professional Membership / Qualifications / Recognition	9

NO	NAME OF PROFESSIONAL MEMBERSHIP	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	ROLE	YEAR
<b>INTERNATIONAL</b>				
1.	American Chemical Society		Regular Member	2022-present
2.	Society for Research Development		Life member & International Technical Committee Members	2018-present
3.	International And Engineering Educators Association (ITEEA)		Member	2017-2018
4.	Institute of Electrical and Electronics Engineer (IEEE)		Member	2016-2017
<b>NATIONAL</b>				
1.	Certified TRIZ Practitioner		Level 1 Practitioner	2023-present
2.	National Autism Society of Malaysia		Ordinary Member	2023-present
3.	Persatuan Pendidikan Sains dan Matematik Johor		Life member Former President (2019-2022)	2020-present
4.	Research Group of Science and Mathematics Education		Committee	2015-present

5.	Certified Master Trainer Of Computational Thinking	Master Trainer	2017-present
6.	Professional Certificate for Entrepreneurship Educator & Certified Trainers	HRDF Certified Trainer	2019-present
7.	Kesatuan Perkhidmatan Perguruan Kebangsaan	Member	2000-2016
8.	Society Of Engineering Education Malaysia (SEEM)	Member	2021-present
9.	Veterinary Club FPV UPM	President	1993-1998

#### ADMINISTRATIVE EXPERIENCE

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT/ FACULTY/ DIVISION
1.	Head of Chemistry Education Laboratory	1 January 2023	31 December 2023	FACULTY FSSH
2.	Postgraduate Program Coordinator (Chemistry Education)	1 January 2023	31 December 2023	FACULTY FSSH
3.	Postgraduate Program Coordinator (Science Education)	1 January 2023	31 December 2023	FACULTY FSSH
4.	Program Coordinator for ChemThink Workshop	1 June 2023	7 June 2023	FACULTY FSSH
5.	Program Coordinator for Webinar Pentaksiran Amali	10 December 2022	16 January 2023	FACULTY FSSH
6.	Program Director of Online Global Classroom (OGC) For Enhancing Higher Education Student Chemistry Learning	23 November 2022	31 December 2022	FACULTY FSSH
7.	Executive Committee of UTM OGC- Inbound & Outbound Program	23 November 2022	31 December 2022	FACULTY FSSH
8.	Program Director for the International Conference on Science and Mathematics Education (ICSME 2022)	1 January 2022	31 December 2022	FACULTY FSSH & Persatuan Sains dan Matematik Johor (PPSMJ)
9.	Program Director for the Festival of Science and Mathematics	1 January 2022	31 December 2022	FACULTY FSSH & PPSMJ
10.	Program Director for the Johor State Elementary School	1 September 2022	31 December 2022	UNIVERSITY FSSH & FKE, UTM

	Level Disabled Flood Boat Design Competition			
11.	Program Director for the Johor State Matriculation College Disabled Flood Boat Design Competition	1 September 2022	31 December 2022	UNIVERSITY FSSH & FKE, UTM
12.	Program Leader for the Gambit the Gambot Competition	1 January 2022	31 December 2022	FACULTY FSSH & PPSMJ
13.	Program Lecturer for Online Distance Learning Program of FSSH	20 Mac 2022	31 December 2022	FACULTY FSSH
14.	Conference Committee of International Conference On Education (ICE) 2022	1 Jun 2022	31 December 2022	FACULTY FSSH
15.	Member of Highly Cited Researcher Award Panel	1 June 2022	31 December 2022	FACULTY FSSH
16.	Evaluator Committee of FSSH Apel C	1 June 2022	31 December 2023	FACULTY FSSH
17.	Emergency Response Team Members (ERT) For Blocks C13, C14, C15 And C22	1 January 2022	31 December 2022	FACULTY FSSH
18.	Task Force Committee of Academic Quality Award for FSSH	1 February 2022	31 December 2022	FACULTY FSSH
19.	Program Coordinator (Chemistry Education)	1 January 2022	31 December 2022	FACULTY FSSH
20.	Program Coordinator (Science Education)	1 January 2022	31 December 2022	FACULTY FSSH
21.	Special Program Coordinator (Chemistry Education)	1 January 2022	31 December 2022	FACULTY FSSH
22.	Assistant Chair for Online PhD Viva Voce for Faculty of Engineering	13 January 2022	13 January 2022	FACULTY FSSH
23.	Preparation of Compliance Audits Task Force for the of the Research Mode Master of Education Program and Doctor of Philosophy in the	1 August 2021	31 December 2021	UNIVERSITY Faculty of Engineering, UTM

	School of Education			
24.	Preparation Audit Compliance task force for Master of Education Course Work Mode And Mix Mode of SOE	1 May 2021	31 December 2021	FACULTY FSSH
25.	Supervisor of teaching practice	20 January 2021	30 April 2021	FACULTY FSSH
26.	Chairman Assistant for Viva Voice PhD Students of Faculty of Engineering, Universiti Teknologi Malaysia	20 May 2021	20 May 2021	FACULTY FSSH
27.	Committee of the Community Engagement and Service Learning	1 January 2020	31 December 2020	FACULTY FSSH
28.	Program Committee of International Webinar On Marine Environment	9 December 2020	10 December 2020	FACULTY FSSH
29.	STEM Video Challenge Module Activity Committee	14 December 2020	15 December 2020	FACULTY FSSH
30.	Executive Committee of Program UTM OGC- Inbound & Outbound	23 November 2020	19 December 2020	FACULTY FSSH
31.	Academic Advisor	4 October 2020	31 December 2021	FACULTY FSSH
32.	Chair of the UTM Online Global Classroom Bagi Computational Thinking For Problem Solving	23 November 2020	19 December 2020	FACULTY FSSH
33.	Chairperson for the Master Education Viva Vvoce session of Master	19 November 2020	19 November 2020	FACULTY FSSH
34.	Chair of the Task Force Committee Study tours Program for SMK Simpang Renggam	11 February 2020	11 February 2021	FACULTY FSSH
35.	University Graduate Marketability Committee	1 June 2020	31 May 2021	FACULTY FSSH

36.	Consulting, Innovation and Commercialization Committee	1 January 2020	17 Mac 2020	FACULTY FSSH
37.	Preparation of Curriculum Review Working Papers Committee	1 February 2020	31 December 2020	FACULTY FSSH
38.	Task force of Academic Quality Award	1 January 2020	31 December 2020	FACULTY FSSH
39.	Head of Chemistry Education Laboratory	1 January 2018	31 December 2020	FACULTY FSSH
40.	Science And Mathematics Research Group	1 January 2019	31 December 2021	DEPARTMENT RG SME
41.	STEM Interest-Ignition Program	1 January 2019	31 December 2019	FACULTY FSSH
42.	Chairman for 1st Science, Technology, Engineering, Arts and Mathematics Education Conference in conjunction with 7th World Engineering Education Forum 2017	11 November 2017	17 November 2017	FACULTY FSSH & CEE, UTM
43.	Assistant secretary for the International Seminar on Science and Mathematics Education (ISSME), Faculty of Education, UTM	11 April 2016	13 April 2016	FACULTY FSSH
44.	Chemistry Education Postgraduate Program Coordinator	1 Januari 2017	31 Disember 2021	FACULTY FSSH
45.	Coordinator for Visiting Professor Program – AP Dr Tara Shirazi.	17 September	21 September 2017	FACULTY FSSH
46.	Chairman for Viva Voce Master Students of of Faculty of Education, Universiti Teknologi Malaysia	19 November 2020	19 November 2020	FACULTY FSSH
47.	Chairman Assistant for Viva Voice PhD Students of Faculty of Education, Universiti Teknologi Malaysia	7 November 2019	7 November 2019	FACULTY FSSH
48.	Chairman Assistant for Viva Voice PhD Students	30 April 2019	30 April 2019	FACULTY FSSH

49.	Coordinator for PPSMJ Educational Visit to Thailand	22 Mac 2017	24 Mac 2017	FACULTY FSSH
50.	Program Director for the Discovery Inquiry, organized by Petrosains, the Discovery Centre in Partnership with UTM, BPSH and MOE, Johor	3 November 2015	4 November 2015	FACULTY FSSH
51.	Chairman Assistant for Viva Voice PhD Students	28 September 2015	28 September 2015	FACULTY FSSH
52.	Chairman Assistant for Viva Voice PhD Students	29 December 2015	29 December 2015	FACULTY FSSH
53.	Executive Committee Member of the International Conference on Education in Higher Order Thinking Skill 2016	3 August 2015	31 December 2021	FACULTY FSSH
54.	Task force for Research, Innovation, Publication, Entrepreneurial Mindset & Networking (RIPENS)	3 August 2015	31 December 2015	FACULTY FSSH
55.	Task Force for Spirit of Togetherness	28 September 2015	30 September 2015	DEPARTMENT SOE
56.	Head of Chemistry Panel	3 July 2000	15 January 2011	SMK Tat Beng, Perak
57.	Acting Head	3 February 2015	15 February 2015	Department of Research & Development Division, SEAMEO RECSAM, Penang

## CONSULTATION WORKS

Summary	
Consultation Project-UTM	2 projects (RM 12000.00)
Consultation Project- Other	11 projects (RM 403242.81)

## Project Leader

No.	Year	Title	Value	Vot
1.	2022	Festival Sains dan Matematik 2022	RM 8055.00	Vot 185 UTIM
2.	2022	Kajian "An Experiential Learning Approach To Develop Graduate Attributes"	RM57656.70	Vot 2086 UTSB
3.	2019	Homeless Management Information System (HOMIE)(Social	RM4000.00	UTM Grand

		Work- End Homelessness)		Challenges 2019
4.	2019	Kajian Minat Dan Sikap Pelajar Terhadap STEM Melalui Program Create Attack	RM2000.00	Vot.1569 UTSB
5.	2018	Visible the invisible (Social Work- End Homelessness)	RM8000.00	UTM Grand Challenges 2018
6.	2018	Computational Thinking with Arduino Starter Kit during Computational Thinking Special Session in ICSTEM 2018	RM2680.00	DreamCatcher Sdn Bhd
7.	2018	Developing Computational Thinking Through Graphic Calculator In Steam Education	RM1800.00	Statwork Sdn Bhd
8.	2016	Innovative Practices in Education and Industry Exhibition Project	RM5300.00	Vot.1052 UTSB

### Project Member

1.	2020	Computational Thinking MOA on Research Collaboration UTM-UM	RM50000.00	UM.W/514
2.	2019	STEM Interest-ignition Program	RM10,000.00	Vot.75 UTIM
3.	2019	UTM international sit in teaching and learning peer coaching module	RM 51000.00	Vot. UTM77 UTSB
4.	2016	6 <sup>th</sup> Regional Conference on Engineering Education 2016	RM114784.11	Vot.1030 UTSB
5.	2015	Kajian Verifikasi Penarafan Smart School Qualification & Standards (SSQS)	RM100,000.00	PU/2015/10616

### INTERNATIONAL/NATIONAL/UNIVERSITY COMMITTEE

Summary	
International Committee	23
National Committee	7
University Committee	9
Faculty Committee	29
Community Committee	17

### International

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	2nd International Conference on Social Science (ICONESS) 2023	Technical Program Committee Chairs	18/03/2023	23/07/2023
2	2nd International Conference on Humanities, Wisdom Education and Service Management (HWESM 2023)	Technical Program Committees	10/03/2023	12/03/2023
3	Universitas Riau International Conference on Education Technology 2021 (URICET-2021)	International Scientific Board	01/04/2021	14/10/2021

4	1 <sup>st</sup> International Seminar on Teaching Training and Education (ISTED2021)	Technical Program Committees	01/05/2021	18/07/2021
5	Program International Webinar On Marine Environment	Committee member	09/12/2020	10/12/2020
6	UTM Online Global Classroom of Computational Thinking For Problem Solving	Chair	23/11/2020	19/12/2020
7	Co-Chair ICONMESSH'20	Chair of Presentation Session	14/08/2020	15/08/2020
8	Society For Research Development	Committee member	01/01/2020	31/12/2021
9	Technical Committee Society For Research Development	Committee member	01/01/2019	31/12/2021
10	UTM International Sit In	Committee member	28/08/2019	31/12/2019
11	Academic Visit Program from Universitas Negeri Jakarta	Chair	04/07/2019	04/07/2019
12	STEM Program in conjunction with the academic visit of Korean students to the School of Education	Chair	15/01/2019	15/01/2019
13	SIT-IN Teaching Training Program of Indonesia-UMJ & UMMI	Committee member	02/07/2018	01/07/2019
14	Work Process For Sit In Program Universitas Negeri Makasar	Committee member	01/01/2018	20/06/2018
15	International Conference On Creative And Innovative Technology In Education	Committee member	24/07/2018	25/07/2018
16	World Engineering Education Forum 2017	Committee member	13/11/2017	16/11/2017
17	OBE & SCL Champion Afghanistan	Committee member	09/10/2017	09/10/2017
18	IPHEX 2017	Committee member	16/11/2017	16/11/2017
19	SIT-IN Teaching Training Program of Muhammadiyah University Of Jakarta, Indonesia	Committee member	10/07/2017	07/08/2017
20	SIT-IN Teaching Training Program of Universitas Negeri Malang, Indonesia	Committee member	31/07/2017	27/08/2017
21	SIT-IN Teaching Training Program of Universitas Muhammadiyah Purworejo, Indonesia	Committee member	12/02/2017	11/03/2017

22	SIT-IN Teaching Training Program of Universitas Muhammadiyah Purwokerto, Indonesia	Committee member	14/02/2017	14/03/2017
23	SIT-IN Teaching Training Program of University Of Sukabumi, Indonesia	Committee member	27/03/2017	23/04/2017

### National

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1.	Organising Committee for the 1 <sup>st</sup> National Conference on SULAM 2021	Committee member	22/01/2021	30/12/2021
2.	Technical Committee for the National Micro Enterprise Pitching Competiton 2021, Kementerian Pengajian Tinggi	Committee member	29/05/2021	30/05/2021
3.	Kembara STEM Kebangsaan	Chair	01/10/2019	14/10/2019
4.	National Science Week Opening & Closing Program Exhibition (Johor 2019) Organized by the Malaysian Academy of Sciences	Chair	03/08/2019	04/08/2019
5.	National Science Challenge	Committee member	09/01/2018	13/08/2018
6.	STEM Diagnostic Item Quality Workshop	Committee member	02/07/2017	31/12/2017
7.	Bilingual Item Quality Assurance Committee	Committee member	01/06/2017	31/12/2018

### University

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1.	AJK Pelaksana Program UTM OGC- Inbound & Outbound	Committee member	23/11/2020	19/12/2020
2.	Kebolehpasaran Graduan Universiti	Committee member	01/06/2020	31/05/2021
3.	Homelessness Management Information System	Chair	01/10/2019	31/12/2019
4.	Learning Adventure Programme	Committee member	09/07/2019	09/07/2019
5.	Karnival Stemorhosis	Chair	28/02/2019	28/02/2019
6.	Visible The Invisble	Chair	27/09/2018	14/11/2018
7.	Mini Karnival STEAM	Chair	25/02/2018	25/02/2018
8.	WEEF2017	Committee member	01/01/2017	18/11/2017
9.	Badan Kebajikan Staff UTM	Committee member	01/01/2017	31/12/2021

**Faculty**

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1.	Innovation And Commercialization Awards Panel for the Appreciation Awards Of The FSSH 2023	Committee member	01/06/2023	29/08/2023
2.	International Innovation Competition Education 2023 (IICE23)	Committee member	01/05/2023	31/12/2023
3.	Program ODL Sekolah Pendidikan Mppu1003 - Seksyen 52	Reviewer Committee	20/03/2022	31/12/2022
4.	Conference on ICE2022	Committee member	01/06/2022	31/12/2022
5.	Anugerah Penyelidik Bersitasi Tinggi MAFSSH 2022	Panel	01/06/2022	31/12/2022
6.	Jawatankuasa Apel C Fakulti Sains Sosial Dan Kemanusiaan	Evaluator Committee	01/06/2022	31/12/2023
7.	Ahli Pasukan Bertindak Kecemasan (ert) Bagi Blok C13, C14, C15 Dan C22	Searcher/ Rescuer	01/01/2022	31/12/2022
8.	Jawatankuasa Task Force Anugerah Kualiti Akademik (aka 2021) Bagi Tahun 2022 Fakulti Sains Sosial Dan Kemanusiaan	Committee member	01/02/2022	31/12/2022
9.	Penyelaras Program Pascasiswazah Pendidikan Kimia	Coordinator	01/01/2020	31/12/2023
10.	Jawatankuasa Libatsama Komuniti Dan Pembelajaran Servis	Committee member	01/01/2020	31/12/2020
11.	Penasihat Akademik	Committee member	04/10/2020	31/12/2021
12.	Perundingan, Inovasi Dan Komersialisasi	Committee member	01/01/2020	17/03/2020
13.	Penyediaan Kertas Kerja Semakan Kurikulum	Committee member	01/02/2020	31/12/2020
14.	Anugerah Kualiti Akademik (AKA 2019)	Committee member	01/01/2020	31/12/2020
15.	Science And Mathematics Research Group	Committee member	01/06/2015	31/12/2021
16.	Semakan Kurikulum Pasca Siswazah Mqf 2.0 Sekolah Pendidikan	Committee member	01/10/2019	31/08/2020
17.	Jawatankuasa Kecil Penyediaan Maklumat Kursus (L1) Program Diploma Pendidikan	Committee member	12/11/2018	31/12/2019
18.	Ketua Makmal Pendidikan Kimia	Chair	01/07/2018	30/06/2020
19.	Ajk Pameran STEM	Chair	23/04/2018	23/04/2018
20.	Fasilitator Dan Wakil Jabatan Blended Learning Fakulti	Committee member	01/01/2017	31/12/2017

	Pendidikan Bagi Tahun 2016/2017			
21.	Penyelaras Pembangunan Kerjaya Mahasiswa Fakulti Pendidikan	Chair	01/01/2017	31/12/2017
22.	Bengkel Semakan Kod Kursus Dan Kod Penyelidikan Serta Structured Study Plan	Committee member	10/10/2017	10/10/2017
23.	Bengkel Perancangan Strategik (Siri 1) Fakulti Pendidikan	Committee member	21/12/2017	21/12/2017
24.	Jawatankuasa Kelab Kebajikan Staf Fakulti Pendidikan	Committee member	01/01/2017	31/12/2017
25.	Program Profesor Pelawat	Chair	17/09/2017	17/09/2017
26.	Sesi Dialog Bersama Tokoh	Committee member	15/02/2017	15/02/2017
27.	Karnival Suka Belajar	Committee member	07/05/2017	07/05/2017
28.	Task Force Semakan Kurikulum Program Pra Siswazah Fakulti Pendidikan	Committee member	10/07/2017	31/12/2017
29.	Hari Inovasi Fakulti Pendidikan UTM	Committee member	12/12/2017	28/12/2017

### Community

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1.	Persatuan Pendidikan Sains Dan Matematik Johor	President	01/01/2021	31/12/2021
2.	Alumni UPM	Committee member	01/01/2021	31/12/2021
3.	Alumni USM	Committee member	01/01/2021	31/12/2021
4.	Aktiviti Modul Cabaran Video STEM-Periuk Solar	Chair	14/12/2020	15/12/2020
5.	Task Force Program Lawatan Smk Simpang Renggam	Chair	11/02/2020	11/02/2020
6.	STEM Interest-Ignition Program	Chair	01/01/2019	31/12/2019
7.	STEM Day Smk Mutiara Rini	Chair	10/03/2019	30/04/2019
8.	Pameran/Aktiviti Sempena Minggu STEM	Chair	19/06/2019	25/06/2019
9.	Karnival Dan Pameran Sains Sk Khir Johari	Committee member	15/05/2018	15/05/2018
10.	Karnival Dan Pameran Mega STEM SMK Sultan Ismail	Committee member	11/04/2018	11/04/2018
11.	Karnival STEM SMK Gelang Patah	Chair	18/07/2018	18/07/2018
12.	Program Pelajar Minat Steam Perpustakaan Sultan Ismail Cawangan Kampung Melayu	Chair	06/06/2018	06/06/2018
13.	Mini Karnival STEAM	Chair	04/07/2018	04/07/2018

	Perpustakaan Sultan Ismail Cawangan Permas Jaya			
14.	Kembara STEM UTM-JPNJ	Chair	10/10/2018	10/10/2018
15.	Program Mentor Mentee (Fasa 2) Utm-Jpn Johor	Committee member	22/11/2017	22/11/2017
16.	Eksplorasi STEM UTM-JPNJ Peringkat Negeri Johor	Committee member	21/05/2017	21/05/2017
17.	Seminar Amalan Refleksi Menerusi Kajian Tindakan SM Islam As-Syddiq	Committee member	25/11/2017	25/11/2017

#### SELECTED ACTIVITIES / WORKSHOPS / SEMINARS / COURSES

NO	NAME OF ACTIVITIES	PLACE OF ACTIVITIES	STARTING DATE	ENDING DATE
1.	TRIZ Level 1 Professional Certification Workshop	UTM	10/06/2023	11/06/2023
2.	Product Pitching	FB ICC UTM	20/03/2023	20/03/2023
3.	Sharing The Ups And Downs Of Project- Based Learning (PjBL) Practices In Higher Education	WEBEX UTM	18/10/2022	18/10/2022
4.	Alternative Authentic Assessment	WEBEX UTM	07/09/2022	07/09/2022
5.	What Does The Research Infused Experiential Learning (REAL) Really Mean	WEBEX UTM	21/07/2022	21/07/2022
6.	Webinar U4S: kelestarian Sungai Kim Kim dan masyarakat	UTM	29/07/2021	29/07/2021
7.	TechCamp Malaysia - Philippines: Teaching Media and Information Literacy Skills in Everyday Life (5c)	TechCamp Malaysia and Penang Institute	29/03/2021	31/03/2021
8.	Online Workshop on Technology in Science Teaching	SEAMEO RECSAM	23/03/2021	24/03/2021
9.	Bengkel Serantau LESMAT (Borderless) Education 4.0	SEAMEO RECSAM	15/03/2021.	19/03/2021
10.	Bengkel Edited Book Dalam Talian 2021	UTM	25/04/2021	25/04/2021
11.	Technopreneurship Webinar	UTM	31/01/2021	31/01/2021
12.	From Wolfram Knowledge-based Search Engine to Computational Thinking Webinar	Wolfram Mathematica Malaysia Partner	29/12/2020	29/12/2020
13.	ALP104 : Elevator Pitch	UTM	08/07/2020	08/07/2020
14.	ALP104: Presentation Skill	UTM	18/06/2020	18/06/2020
15.	Bengkel Anugerah Kualiti Akademik (AKA 2019) Bagi Tahun 2020 Fak Sains Sosial Dan Kemanusiaan	UTM	18/02/2020	10/03/2020

16.	Bengkel Penyediaan Proposal PRGS 2.0 2020 FSSH	UTM	19/05/2020	19/05/2020
17.	Bengkel Peluang dan Strategi memperoleh Geran Industri dan Antarabangsa	UTM	09/06/2020	09/06/2020
18.	CCIN Online Roadshow Siri 2: Penilaian Projek Libatsama Komuniti Berimpak Tinggi	UTM	06/05/2020	06/05/2020
19.	Cradle Bootcamp Pitching Session	UTM	27/09/2020	28/09/2020
20.	Cradle Technology Commercialisation Bootcamp	UTM	05/06/2020	11/09/2020
21.	Experienced Supervisor Refresher Course (AS201)	UTM	16/12/2020	16/12/2020
22.	Interactive Online Learning Activities (H5P In E-Learning UTM)	UTM	29/03/2020	29/03/2020
23.	Intergrating Online Classroom Practice, TNL Pedagogy And Education 4.0 Tools	UTM	11/10/2020	11/10/2020
24.	Kursus " Create And Edit Your Own Learning And Teaching Video Using Smartphone	UTM	10/06/2020	10/06/2020
25.	Kursus M4E : Innovation Marketing	UTM	29/06/2020	29/06/2020
26.	Kursus Pembelajaran Teradun FSSH	UTM	05/02/2020	05/02/2020
27.	Kursus Screen Casting Made Easy	UTM	02/07/2020	02/07/2020
28.	Remote Supervision Course (AS104)	UTM	25/06/2020	25/06/2020
29.	Bengkel Penerbitan FSSH Siri Kedua	UTM	29/06/2020	29/06/2020
30.	Workshop On High Impact Community Engagement Proposal	UTM	02/10/2019	02/10/2019
31.	A 2 Day Workshop On "Get The Message ? " Effective Communication : Vocals & Verbals	UTM	7/02/2018	08/02/2018
32.	Bengkel Projek Linbatsama Komuniti & Peluang Geran Jaringan	UTM	29/08/2018	29/08/2018
33.	Bengkel Sesi Perkongsian Pelan Strategik Myra	UTM	28/11/2018	28/11/2018
34.	Bengkel Geran IISJ	UTM	22/01/2017	22/01/2017
35.	Bengkel Pembangunan Networking Platforms: Goole Scholar, Research Gate, Linkedid dan Orcid	UTM	23/05/2017	23/05/2017
36.	Bengkel Workshop on the PRGS and FRGS	UTM	04/01/2017	04/01/2017

37.	Kursus Blended - Learning Level 5 dan Google Page Ranked Webometriks	UTM	26/03/2017	26/03/2017
38.	Workshop On Academic Writing And Publishing By Enago	UTM	06/09/2017	06/09/2017
39.	Workshop On Active Learning Modules-Bringing Hands-On Experience To The Classroom	UTM	13/11/2017	13/11/2017
40.	Workshop On Making Academic Change Happen	UTM	17/11/2017	18/11/2017

## RESEARCH ACTIVITIES

Summary	
Principal Investigator- International Grants	<b>0 projects (RM0)</b>
Principal Investigator- National Grants	<b>3 projects (RM 151,680.00)</b>
Principal Investigator- UTM Grants	<b>4 projects (RM 55,000.00)</b>
Member- International Grants	<b>7 projects (RM 952,291.13)</b>
Member- National Grants	<b>6 projects (RM 435,480.00)</b>
Member- UTM Grants	<b>12 projects (RM 438,000.00)</b>
Member- Others	<b>13 projects (RM 157,474.00)</b>

### As a principal investigator

BIL	NAME OF GRANT	ROLE	CATEGOR Y OF GRANT (UTM/ OTHERS)	TYPE OF GRANT	AMOUNT (RM)	STARTING DATE	ENDING DATE	VOTE NO
<b>National Grants</b>								
1.	Development Of A Framework For Problem Solving Embedded With Visual Programming Language In Improving Problem Solving Skill In Stem Teaching And Learning	LEADER	OTHERS	FRGS KPT	64,000.00	1/9/2022	31/8/2024	5F544
2.	Development of Interactive Science Educational Board Game (Scibog) Using Game Based Learning	LEADER	OTHERS	MATCHING GRANT (MG)	5,000.00	1/4/2022	30/9/2023	4B764

	through Augmented Reality Technology For Promoting Interest and Cognitive Development among Children							
3.	GamBot: Educational game Mobile Robot for Promoting Hypothetico-creative Reasoning Among Students.	LEADER	OTHER	PRGS KPT	82,680.00	01/12/2019	20/11/2021	4L709
<b>UTM Grants</b>								
1.	Scratchtopia Challenge: From Science Experiment to Coding	LEADER	UTM	PRGS ICC	20,000.00	01/06/2020	30/11/2020	4J463
2.	KTP-NMG Pemindahan Ilmu Kemahiran Pemikiran Komputasional Kepada Murid Daripada Keluarga Berpendapatan Rendah	LEADER	UTM	BE	5,000.00	01/02/2019	31/07/2019	4Y174
3.	Development Of An Assessment Instrument On Scientific Reasoning In Preparing For The Fourth Industrial Revolution	LEADER	UTM	Tier 2	10,000.00	01/02/2018	31/01/2019	14J82
4.	Developing Green And Microscale Experiments To Enhance 21 Century Learning Science,	LEADER	UTM	EG	20,000.00	01/9/2015	30/11/201	11J38

Mathematics, Engineering And Mathematics (STEM) Education In Malaysia								
--	--	--	--	--	--	--	--	--

### As A Scientific Member

BIL	NAME OF GRANT	ROLE	CATEGORY OF GRANT (UTM/ OTHERS)	TYPE OF GRANT	AMOUNT (RM)	STARTING DATE	ENDING DATE	VOTE NO
<b>International Grants</b>								
1.	Improving Understanding Of Concepts, Aspects And Levels Of Representation Competence Among Indonesia And Malaysia Pre-Service Chemistry Teacher: A Comparative Studies. <b>Project Leader: AP Dr Johari Surif, FSSH, UTM</b>	MEMBER	OTHERS	MATCHING GRANT (MG)	40,000.00	01/04/2023	31/03/2025	04M44
2.	The Pictorial-Based Learning For Building Students' Argumentation Skills & Deep Understanding Of General Chemistry. <b>Project Leader: AP Dr Johari Surif, FSSH, UTM</b>	MEMBER	OTHERS	MG	20,000.00	01/04/2023	31/03/2025	4B865
3.	Improving Understanding Of Concepts, Representations , Aspects And Levels Of Representationa	MEMBER	OTHERS	MG	20,000.00	01/04/2023	31/03/2025	4B864

	I Competence Of Prospective Chemistry Teacher. <b>Project Leader: AP Dr Johari Surif, FSSH, UTM</b>							
4.	Pengembangan Edukits Berbasis STEM Pada Bidang Kajian Nano Drugs Targeting Untuk Terapi Kanker (Tahun Ke-II). <b>Project Leader: AP. Ts. Chm. Dr. Nik Ahmad Nizam Bin Nik Malek, CSNANO, UTM</b>	MEMBER	OTHER	MG	26,000.00	2/6/2021	22/11/2021	4B684
5.	Pengembangan Edukits Berbasis STEM Pada Bidang Kajian Nano Drugs Targeting Untuk Terapi Kanker (Tahun Ke-II) <b>Project Leader: AP. Ts. Chm. Dr. Nik Ahmad Nizam Bin Nik Malek, CSNANO, UTM</b>	MEMBER	OTHER	MG	26,557.00	02/06/2021	31/05/2023	03M46
6.	Marine Coastal And Delta Sustainability For South East Asia (MARE). <b>Project Leader: Prof Dr. Adi Maimun Abdul Malik</b>	MEMBER	OTHER	CONTRACT	345,266.72	15/1/2020	14/1/2023	4C353
7.	Innovative Teaching And Learning Strategies In Open Modelling	MEMBER	OTHER	EC	474,467.41	15/10/2016	14/10/2019	4C118

	And Simulation Environment For Student-Centered Engineering Education/InMotion, Erasmus Mundus. <b>Project Leader, Prof Adi Maimun Abdul Malik, MTC UTM</b>							
<b>National Grants</b>								
1.	Development of a framework for unplugged computational thinking activities in improving the interest and skills in programming. <b>Project Leader: AP Dr Sim Tze Ying, University Sunway</b>	MEMBER	OTHERS	FRGS KPT	55,000.00	01/09/2022	31/08/2024	20076
2.	Framework For Supporting Secondary School Students' Metacognition In Mathematics Problem Solving With Augmented Reality. <b>Project Leader: Dr.Norulhuda Binti Ismail, FSSH UTM</b>	MEMBER	OTHERS	FRGS KPT	96,500.00	01/01/2020	30/06/2023	20H89
3.	A Framework For Scenario-Based Learning In Statistics And Probability To Ignite Form Four Students' Interest In STEM Careers.	MEMBER	OTHERS	FRGS KPT	100,300.00	01/11/2020	31/10/2023	5F414

	<b>Project Leader: Dr Norulhuda Ismail, FSSH UTM</b>							
4.	Model Pembelajaran STEM Luar Bilik Darjah (PSLBD) Dalam Meningkatkan Kemahiran Abad 21. <b>Project Leader: Pn. Marlina Ali, FSSH UTM</b>	MEMBER	OTHERS	FRGS KPT	65,000.00	01/11/2020	31/10/2022	5F399
5.	A Malaysian Model of Inquiry-based Learning for STEM Teachers. <b>Project Leader: Prof Dr Fatin Aliah Phang, FSSH UTM</b>	MEMBER	OTHERS	FRGS KPT	60,000.00	01/09/2019	31/08/2021	5F140
6.	Pembangunan Insan Dan Pengurusan Trauma Mangsa Banjir Di Pusat Pemindahan. <b>Project Leader: AP Dr Johari Surif, FSSH, UTM</b>	MEMBER	OTHERS	FRGS KPT	58,680.00	01/04/2015	31/12/2015	4F694
<b>UTM Grants</b>								
1.	Improving Language Skills of Children with Dyslexia by Using The Pirate Of Word King Mobile Application. <b>Project Leader: Prof Dr. Yeo Kee Jiar, FSSH UTM</b>	MEMBER	UTM	Prototype Research	79,000.00	01/01/2020	30/06/2022	00L29
2.	Adaptive Learning Framework Using	MEMBER	UTM	UTMHR	128,000.00	01/01/2020	31/12/2022	08G67

	Educational Robotics For Computational Thinking Education. <b>Project Leader:</b> <b>Prof Dr Dayang Norhayati Abang Jawawi, FC UTM</b>							
3.	Hubungan Konsep Kendiri Kimia Pelajar Dengan Kemahiran Menghujah Secara Saintifik Pelajar. <b>Project Leader:</b> <b>Dr Chuzairy Hanri, FSSH UTM</b>	MEMBER	UTM	UTMER	15,000.00	01/11/2019	31/10/2021	18J56
4.	Penguasaan Kemahiran Berfikir Aras Tinggi Dalam Matematik Menerusi Strategi Pembelajaran Kooperatif Think-Talk-Write. <b>Project Leader:</b> <b>Dr. Sharifah Osman, FSSH UTM</b>	MEMBER	UTM	Tier 2	15,000.00	01/08/2019	31/07/2021	16J38
5.	HIR 3.2 : Data Driven Curriculum Innovation in STEM. <b>Project Leader:</b> <b>AP Dr Johari Surif, FSSH, UTM</b>	MEMBER	UTM	HIR	36,000.00	01/04/2018	31/3/2021	04G91
6.	Math-Related Ciritcal Thinking in Complex Problem Solving for Engineering Education.	MEMBER	UTM	UTM(RU) PAS	10,000.00	15/10/2017	14/10/2018	03K06

	<b>Project Leader: Dr Sharifah Osman</b>							
7.	Enhance Student-Centered Pedagogy Skills Among UTM Students Through Service Learning. <b>Project Leader: Prof Dr. Noraffandy Yahaya, FSSH UTM</b>	MEMBER	UTM	UTM (DPP)	10,000.00	15/7/2016	30/06/2018	4J248
8.	Scenario Based Learning: Strategi Dan Pelaksanaan Dalam Membangunkan Kemahiran Abad Ke 21. <b>Project Leader: AP Dr Johari Surif, FSSH, UTM</b>	MEMBER	UTM	UTM (DPP).	10,000.00	15/7/2016	14/07/2018	4J249
9.	The Effectiveness Of Young Innovate Program On Students Interest And Success In STEM. <b>Project Leader: Pn Marlina Ali</b>	MEMBER	UTM	UTM (RU) Tier 1	50,000.00	01/07/2016	30/06/2018	13H68
10.	Faktor-faktor Yang Mempengaruhi Minat Saintifik: Pembelajaran STEM Sebagai Strategi Penyelesaian. <b>Project Leader: AP Dr Nor Hasniza Ibrahim, FSSH UTM</b>	MEMBER	UTM	UTM(RU)	50,000.00	01/07/2016	30/06/2018	13H69

11.	KTP NMG 2019 : Pemindahan Pengetahuan STEM Terhadap Guru Dan Murid Sek. Men. Keb Seri Pulai Perdana Menerusi Modul Pengajaran I STEM. <b>Project Leader: AP Dr Nor Hasniza Ibrahim, FSSH UTM</b>	MEMBER	UTM	BE	5000.00	01/02/2019	31/12/2019	4Y152
12.	Keberkesanan Aktiviti Stem Anjuran Kelab Suka Belajar Utm Di Psi Cawangan Kg Melayu. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>	MEMBER	UTM	TIER 1	30,000.00	01/02/2018	31/01/2020	18H44
<b>Others</b>								
1.	Floating Plastic Debris Monitoring in Marine Area and Its Implication of Ocean Cleanup Technologies at Skudai River and Tebrau River. <b>Project Leader: Dr Kang Hooi Siang, MTC UTM</b>	MEMBER	Other	Contract	74,504.00	07/12/2021	06/12/2022	4C454
2.	Pembangunan Komuniti B40 Pangsapuri Jentayu, Kangkar Pulai: Pemindahan Ilmu STEM Dalam Kalangan Kanak-Kanak Komuniti B40 Menerusi	MEMBER	OTHER	Networking Grant (NG)	5,000.00	01/02/2021	31/01/2022	4X649

	Program Pelajar Minat STEM. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>							
3.	Floating Microalgal Bio-photovoltaic System as Sustainable Power Source for Marine Plastic Cleanup Technologies in the Ocean. <b>Project Leader: Dr Kang Hooi Siang, MTC UTM</b>	MEMBER	OTHER	Industry-International Incentive Grant	20,000.00	01/07/2021	31/12/2022	03M42
4.	Peningkatan taraf pendidikan dan sosial komuniti B40 penduduk flat MBBB menerusi program Prihatin Bandaraya. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>	MEMBER	Other	NG	2500.00	01/02/2019	31/12/2019	4X485
5.	Keberkesanan Program Pelajar Minat STEM (PPMSTEM) dalam meningkatkan prestasi pelajar dalam matapelajaran sains dan matematik. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>	MEMBER	Other	NG	10,000.00	01/01/2018	31/12/2018	4X369
6.	Keberkesanan program kelestarian amalan rendah karbon dalam kalangan pelajar SK Kampong Pasir. <b>Project</b>	MEMBER	Other	NG	100.00	09/04/2018	31/12/2019	4X370

	<b>Leader: Pn Marlina Ali, FSSH UTM</b>							
7.	Keberkesanan Karnival dan pameran mega STEM di Sekolah Sultan Ismail, JB untuk meningkatkan minat dan pilihan kerjaya pelajar. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>	MEMBER	OTHER	NG	1800.00	25/02/2018	14/07/2018	4X360
8.	Meningkatkan peranan perpustakaan sebagai wadah pembinaan dan pengembangan ilmu masyarakat. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>	MEMBER	OTHER	NG	5410.00	07/12/2017	23/04/2018	4X359
9.	Pembelajaran Abad Ke 21. <b>Project Leader: En. Mohd.Ali Ibrahim, FSSH UTM</b>	MEMBER	OTHER	NG	10,000.00	01/03/2016	30/09/2016	4X222
10.	Mengenalpasti keberkesanan karnival suka belajar dalam meningkatkan minat dan sikap pelajar terhadap STEM. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>	MEMBER	OTHER	NG	10,000.00	01/02/2017	31/12/2017	4X264
11.	Meningkatkan peranan ibu bapa, komuniti dan masyarakat dalam pembangunan akademik, sahsiah, disiplin	MEMBER	OTHER	NG	10,500.00	01/02/2017	30/04/2017	4X262

	murid serta kokurikulum melalui Karnival STEM di Kluang. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>							
12.	Mengenalpasti sikap dan minat pelajar sekolah menengah aliran sains terhadap STEM melalui aktiviti eksplorace. <b>Project Leader: Pn Marlina Ali, FSSH UTM</b>	MEMBER	OTHER	NG	5000.00	01/02/2017	31/05/2017	4X263
13.	Perlaksanaan Amalan Refleksi Menerusi Kajian Tindakan Dalam Kalangan Guru. <b>Project Leader: AP Dr Nor Hasniza Ibrahim, FSSH UTM</b>	MEMBER	Other	NG	2660.00	02/05/2017	22/12/2017	4X258

#### COLLABORATION / MOU

NO	NAME OF MOU	LEVEL OF MOU (NATIONAL/INTERNATIONAL)	STARTING DATE	ENDING DATE
1.	Co-Chair In ICRI23	INTERNATIONAL	23 June 2023	24 June 2023
2.	Workshop On STEM	INTERNATIONAL	2 August 2022	3 August 2022
3.	Co-Chair In ICON-MESSH'21	INTERNATIONAL	25 April 2021	10 November 2021
4.	"3 in 1" Program held by Education Administration Study Program	INTERNATIONAL	13 September 2021	17 September 2021
5.	Co-Chair In ICON-MESSH'20	INTERNATIONAL	1 January 2020	15 August 2020
6.	Computational Thinking MOA on Research Collaboration UTM-UM	NATIONAL	24 June 2019	23 June 2020

7.	Training Of Trainers For SCL Part 2: Team-Based Learning Using Cooperative Learning Workshop	NATIONAL	19 October 2017	21 October 2017
8.	Training of trainers in student centred learning and outcome based education for afghanistan champions'.	INTERNATIONAL	9 October 2017	9 October 2017
9.	Lawatan Universiti Seri Wijaya Palembang Indonesia Ke UTM Sempena IEPS 2017	INTERNATIONAL	10 December 2017	11 December 2017
10.	Lawatan Pendidikan Ke Rajamangala University Of Technology Thanyaburi (RMUTT) Thailand	INTERNATIONAL	22 March 2017	22 March 2017
11.	Lawatan Ke Praphamontree Affiliated Schools (PPMAS) Thailand	INTERNATIONAL	22 March 2017	24 March 2017
12.	PROJEK SSQS	NATIONAL	1 June 2015	31 December 2015

## TEACHING ACTIVITIES

Summary	
Total Credit Hours	166

## UNDERGRADUATES

Semester	Sem	Subject Code	Subject	Credit Hour	No of Student
2022/2023	2	SHPK2121	Practical In Chemistry Education I	1	29
	2	SHPK2113	Teaching And Assesment Method In Chemistry	3	29
2022/2023	1	SHPN1022	Sciences And Mathematics Learning	2	29
	1	SHPK3131	Practical In Chemistry Education II	1	30
	1	SHPA2001	Microteaching	2	10

2021/2022	1	SHPP1022-02	Teacher Professionalism	2	42
2020/2021	1	UHAK1032 S22	Introduction to Entrepreneurship	2	33
	1	UHAK1012/ UHMT1012	Graduate Success Attributes	2	18
2019/2020	2	UHAS2122	Critical and Creative Thinking	2	44
	2	UHAK1012/ UHMT1012	Graduate Success Attributes	2	35
2019/2020	1	UHAK1032 S24	Introduction to Entrepreneurship	2	52
	1	UHAK1012/ UHMT1012	Graduate Success Attributes	2	48
	1	UHAK1032 S41	Introduction to Entrepreneurship	2	29
2018/2019	2	UHAK1012/ UHMT1012	Graduate Success Attributes	2	39
	2	UICL2302	Thinking of Science and Technology	2	29
	1	UHAK1012/ UHMT1012	Graduate Success Attributes	2	45
2017/2018	2	UKQA2112	STEM Literature	2	20
2015/2016	2	UKQD1421	Graphic Arts	2	30
2015/2016	1	UKQD1421	Graphic Arts	2	29
<b>Total credits</b>				<b>37</b>	

## POSTGRADUATES

Semester	Sem	Subject Code	Subject	Credit Hour	No of Student
2022/2023	2	MHPK2263	Thinking Skills In Chemistry Education	3	4
	1	MPPS1203/ MPPK1203/ MHPK1133/ MHPS1133	Testing And Evaluation In Science/Chemistry Education	3	11
2021/2022	2	MPPK 1343	Technology In Chemistry Education	3	1
	2	MPPU1003	Innovation In Learning And Teaching	3	19
	2	MPPK 1333/ MHPK2233	Current Issues In Chemistry Education	3	4
	1	MPPS1203/ MPPK1203/	Testing And Evaluation In Science/Chemistry Education	3	5
	1	MPPU1003	Innovation In Learning And Teaching	3	11
	1	MHPU1013	Innovation In Education	3	4
2020/2021	2	MPPK 1343	Technology In Chemistry Education	3	3

	2	MPPU1003	Innovation In Learning And Teaching	3	6
	1	MPPS1203/ MPPK1203/	Testing And Evaluation In Science/Chemistry Education	3	10
2019/2020	2	MPPK 1333	Current Issues In Chemistry Education	3	5
	1	MPPS1203/ MPPK1203/	Testing And Evaluation In Science/Chemistry Education	3	7
	1	MPPU 1080	Academic Writing	3	74
2018/2019	2	MPPU 1070	Critical Analysis	3	42
	2	MPPK 1343	Technology In Chemistry Education	3	6
	2	MPPK 1333	Current Issues In Chemistry Education	3	3
	1	MPPU 1070	Critical Analysis	3	66
	1	MPPS1203/ MPPK1203/	Testing And Evaluation In Science/Chemistry Education	3	13
	1	MPPK 1323	Thinking Skills In Chemistry Education	3	4
	1	MPPU 1080	Academic Writing	3	61
2017/2018	2	MPPU 1070	Critical Analysis	3	51
	2	MPPU 1080	Academic Writing	3	50
	2	MPPK 1333	Current Issues In Chemistry Education	3	3
	2	MPPK 1343	Technology In Chemistry Education	3	2
	1	MPPU 1070	Critical Analysis	3	54
	1	MPPU1003	Innovation In Learning And Teaching	3	13
	1	MPPS1203/ MPPK1203/	Testing And Evaluation In Science/Chemistry Education	3	14
	1	MPPK1113	Models Of Teaching And Learning In Chemistry	3	8
2016/2017	2	MPPK 1343	Technology In Chemistry Education	3	6
		MPPU1003	Innovation In Learning And Teaching	3	23
	1	MPPU 1070	Critical Analysis	3	34
	1	MPPS1203/ MPPK1203/	Testing And Evaluation In Science/Chemistry Education	3	8
	1	MPPK 1323	Thinking Skills In Chemistry Education	3	6
	1	MPPU1003	Innovation In Learning And Teaching	3	16
2015/2016	2	MPPU 1070	Critical Analysis	3	40
	2	MPPK 1343	Technology In Chemistry Education	3	4
	2	MPPU1003	Innovation In Learning And Teaching	3	18
	2	MPPM1223 /	Assessment In Mathematics Education	3	7

	2	MPPS1203/ MPPK1203	Testing And Evaluation In Science/Chemistry Education	3	14
	1	MPPU1003	Innovation In Learning And Teaching	3	14
	1	MPPK 1323	Thinking Skills In Chemistry Education	3	6
	1	MPPK 1353	Problem Solving In Chemistry Education	3	6
<b>Total credits</b>				<b>129</b>	

## SUPERVISION

Summary	
Main Supervisor – PhD (Graduated)	2
Co-Supervisor – PhD (Graduated)	0
Main Supervisor – PhD (Ongoing)	11
Co-Supervisor – PhD (Ongoing)	1
Main Supervisor- Master by Research (Graduated)	0
Main Supervisor- Master by Research (On-Going)	3
Main Supervisor- Master by Taught Course (Graduated)	13
Main Supervisor- Master by Taught Course (On-Going)	1
Main Supervisor- Master by Mixed-Mode (Graduated)	2
Main Supervisor- Master by Mixed-Mode (On-Going)	0
Co-Supervisor- Master by Mixed-Mode (On-Going)	1

### Main Supervisor – Phd (Graduated)

No.	Name	Status (Graduated/ On-Going)	Title	Roles of Supervision
1.	Lee Yen Hong	Graduated	Argumentation in Chemistry Education	Main supervisor
2.	Farul Aliyu	Graduated (GOT)	Virtual reality laboratory in Chemistry Education	Main supervisor

### Co-Supervisor – Phd (Graduated)

No.	Name	Status (Graduated/ On-Going)	Title	Roles of Supervision
1.	-	-	-	-

### Main Supervisor – Phd (Ongoing)

No.	Name	Status (Graduated/ On-Going)	Title	Roles of Supervision
1.	Murugan Sandaram	On-going	Hypothetico Creative Reasoning Model integrated educational Mobile Robotic in Chemistry Education	Main supervisor

2.	Tang Kuan Shuen	On-going	Framework Of Computational Problem Solving In Chemistry Education	Main supervisor
3.	Intan Bidayu Mohd Rafi	On-going	STEAM Framework for Chemsitry Education	Main supervisor
4.	Nur Wahidah Ab Hakim	On-going	Critical thinking in Chemistry Education	Main supervisor
5.	Chang Yi	On-going	A study on psychological resilience of novice chemistry teachers	Main supervisor
6.	Zhang Zongjuan	On-going	Exploring the integration of green chemistry concepts in higher education chemistry education	Main supervisor
7.	Nurul Nazatul Shahizah Binti Mahamad Shobri	On-going	Effectiveness of Plugged-in Chemistry Module on Students' Computational Thinking Skills, Level of Creativity and Hypothetical Reasoning	Main supervisor
8.	Abubakr Mohammed Jamal	On-going	Impact Of Inquiry Based Learning On Efficacy Of Climate Change Education In India	Main supervisor
9.	Lu Bingzhong	On-going	A Comparative Study of Laboratory Activities in Chinese and Malaysian Senior High School Chemistry Textbooks	Main supervisor
10.	Li Yumeng	On-going	Study on Kindergarten STEAM Educational Model in China	Main supervisor
11.	Baba Haruna	On-going	Effect Of Wait-Time On Academic Performance, Attitude, And Retention Among Secondary School Students In Chemistry In Niger State, Nigeria	Main supervisor

#### Co-Supervisor – Phd (Ongoing)

No.	Name	Status (Graduated/ On-Going)	Title	Roles of Supervision
1.	Nor Afiqah Hamizah Binti Noor Ishak	On-going	Enhancing Problem Solving In Differentiation Through Computational Thinking Skills Among Secondary Schools Students	Co-supervisor

#### Main Supervisor- Master By Research (Graduated)

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught-course/ Mixed Mode)	Roles of Supervision
-	-	-	-	-	-

**Main Supervisor- Master by Research (On-Going)**

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught-course/ Mixed Mode)	Roles of Supervision
1.	Noor Hidayu Binti Mat Hussin	On-going	Keberkesanan model pengajaran kimia berasaskan KBAT dan model rekabentuk soalan	Research	Main supervisor
2.	Nurulhuda Bt A.Ghani	On-going	Kesan Penggunaan Video Tiktok Animasi Kimia Terhadap Penguasaan Konsep Teori pelanggaran Topik Kadar Tindak Balas	Research	Main supervisor
3.	Maizatul Nabila Binti Mohd Suratin	On-going	The Effect Of Chemv In Enhancing Students' Science Process Skills In Chemical Substances In Industry	Research	Main supervisor

**Main Supervisor- Master By Taught Course (Graduated)**

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught-course/ Mixed Mode)	Roles of Supervision
1.	Parthiban A/L Arumugam	Graduated	Graphic calculator in chemistry education	Taught-course	Main supervisor
2.	Mazura Khalik	Graduated	Factors influencing students' choice of chemistry courses	Taught-course	Main supervisor
3.	Nora Ramin	Graduated	Chemistry concepts and achievement	Taught-course	Main supervisor
4.	Nordiyana Wahid	Graduated	Hubungan antara pembelajaran abad ke21 terhadap sikap dan pencapaian pelajar	Taught-course	Main supervisor

			kimia teingkatan empat		
5.	Fatin Amirah Binti Mohamad Fuad	Graduated	Relationship between multiple intelligence and science process skills among undergraduate chemistry students in chemistry laboratory learning environment	Taught-course	Main supervisor
6.	Shamini A/P Thanga Rajan	Graduated	Cross-sectional analysis of scientific reasoning skill among students in Kluang District	Taught-course	Main supervisor
7.	Leong Foong Chang	Graduated	Misconceptions of Chemical Equilibrium Among UTM undergraduates	Taught-course	Main supervisor
8.	Nurulhusma Hartini binti Mohd Zameri	Graduated	Implementation stage of the 21st teaching and learning among new and experienced chemistry teachers in the District of Pasir Gudang	Taught-course	Main supervisor
9.	Sarah Aqilah binti Anwar	Graduated	Undergraduates students perception towards laboratory learning environment	Taught-course	Main supervisor
10.	Nurfarahin binti Harun	Graduated	The relationship between learning styles and critical thinking among the undergraduate chemistry students in UTM	Taught-course	Main supervisor

11.	Nur Shafina Mohd Nur	Graduated	Mobile Application in Chemistry Education	Taught-course	Main supervisor
12.	Nur Adilah Rosli	Graduated (Best postgraduate 2022)	The effect of multiple representation through virtual simulation on student achievement and visualisation in acid and base among secondary chemistry students	Taught-course	Main supervisor
13.	Nurul Nazatul Shahizah binti Mahamad Shobri	Graduated	Effectiveness of Plugged-in Chemistry Module on Students' Computational Thinking Skills, Level of Creativity and Hypothetical Reasoning	Taught-course	Main supervisor

#### Main Supervisor- Master By Taught Course (On-Going)

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught-course/ Mixed Mode)	Roles of Supervision
1.	Wan Nor Azlina Binti Wan Abdullah	Ongoing	Pembelajaran Berasaskan Model TWA Dalam Meningkatkan Penguasaan Topik Pengiraan Subjek Kimia Bagi Murid Tingkatan Empat Di Sekolah Harian Biasa	Taught-course	Main supervisor

#### Main Supervisor- Master By Mixed-Mode (Graduated)

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught-course/ Mixed Mode)	Roles of Supervision
1.	Parimalah A/P Loganathan	Graduated	Computational thinking to enhance reasoning skills in Chemistry Education	Mixed Mode	Main supervisor
2.	Hassan Aliyu (International Student)	Graduated	Sokoto chemistry teachers' knowledge, skills and affective in using inquiry-based and computer-assisted learning strategies	Mixed Mode	Main supervisor

#### Main Supervisor- Master By Mixed-Mode (On-Going)

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught-course/ Mixed Mode)	Roles of Supervision
-	-	-	-	-	-

#### Co-Supervisor- Master By Mixed-Mode (On-Going)

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught-course/ Mixed Mode)	Roles of Supervision
1	Sia Ivy	On-going	Investigating the difficulties of teachers in implementing IBSE in Chinese primary schools (SJKC) in Johor	Mixed mode	Co-supervisor

#### UTM POSTGRADUATE EXAMINATION/ VIVA

Summary	
Phd Internal Examiner Viva Voce	0
Phd Internal Examiner Proposal Defense	4
Master Mixed Mode Examiner	6
Master Mixed Mode Examiner Proposal Defense	1
Master Research Mode Examiner	1
Master Research Mode Examiner Proposal Defense	1

**Phd Internal Examiner Viva Voce**

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
-	-	-	-	-

**Phd Internal Examiner Proposal Defense**

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Examiner for Proposal Defense	Low Suan Ee	Impact Of Project-Based Learning On The Scientific Attitudes And Noble Values Among The Primary Indigenous Students In Malaysia	2023
2	Examiner for Proposal Defense	Samijah Binti Ruwiyah	Pembangunan Model Kompetensi Penyoalan Lisan Guru Fizik	2023
3	Examiner for Proposal Defense	Nur Candra Eka Setiawan (International Student)	Kitaran Pembelajaran Hipotetikal Deduktif Berintegrasikan Teknologi Dalam Pembelajaran Kimia Terhadap Kemahiran Abad Ke-21 Pelajar	2023
4	Examiner for Proposal Defense	Manniseh Bt Yakun	Kerangka Pengajaran Kreativiti Stem Bagi Meningkatkan Kemahiran Kreativiti Pelajar Bumiputera Luar Bandar Sabah	2023

**Master mixed mode examiner for the viva voce**

NO	ROLE	STUDENTS NAME	TITLE	YEAR
1.	Examiner for the Viva Voce	Siti Noorehan Binti Mon	Pembelajaran Amali Secara Berbalik Menerusi Modul Inkuiri E-Fliq Bagi Pelajar Matrikulasi	2023
2.	Examiner for the Viva Voce	Adibah Alwi	The Effect Of Predict-Observe-Explain Strategy Towards Students Achievement, Conception And Motivation On Learning Electrochemistry	2021
3.	Examiner for the Viva Voce	Rohaida Ikramullah	Kerangka Alternatif Konsep Asid dan Bes dalam kalangan Pelajar Kimia Daerah Jempol	2020
4.	Examiner for the Viva Voce	Rahayu Ezranie Binti Shuhimi	Amali Inkuiri Berintegrasikan Visual Terhadap Kefahaman Dan Penguasaan Kemahiran Manipulatif Pelajar Dalam Kimia	2017
6.	Examiner for	Murugan Sandaram	Pelaksanaan Amalan Refleksi	2017

	the Viva Voce		Dalam Kalangan Guru-guru Sains Daerah Johor Bahru,	
--	---------------	--	--	--

#### Master Mixed Mode Examinar Proposal Defense

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Examiner for the Proposal Defense	Sairah Ali	Effectiveness Of O-Chem Mecha Kit Module To Enhance Student's Conceptual Understanding Of Sn1 Mechanism Reaction	2023
2	Examiner for the Proposal Defense	Nurul Hanani Rusli	Equi-Brilliant Module To Enhance Higher-Order Thinking Skills In Chemical Equilibrium Among Matriculation Students	2023

#### Master Research Mode Examiner

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Examiner for the Viva Voce	Siti Anisha Binti Samsudin	Amalan Refleksi Berbantuan Aplikasi Mobil Pengetahuan Pedagogi Kandungan	2017

#### Master Research Mode Examiner Proposal Defense

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Examiner for the Proposal Defense	Noor Saadah Binti Mohd Radzuan	Kesan Kaedah Pembelajaran Inkuiri-Visualisasi Terhadap Kefahaman Konsep Asas Kimia	2023

#### EXTERNAL EXAMINATION/ VIVA

Summary	
Phd External Examiner Viva Voce	0
Master External Examiner	3

#### Phd External Examiner Viva Voce

NO	ROLE	STUDENTS NAME	TITLE	YEAR
-	-	-	--	-

#### Master External Examiner

NO	ROLE	STUDENTS NAME	TITLE	YEAR
1.	Examiner for the viva voce	Priscilla Lo Khai Chien	The Effectiveness of STEM Learning Approach Among Secondary School Students in SMK Tamparuli, Tuaran, Sabah, UMS	2021
2.	External Examiner	Nursyahirah Binti Ahmad	Persekitaran Pembelajaran, Pencapaian Dan Minat	2021

			Terhadap Kerjaya STEM Pelajar Tingkatan Empat Aliran Sains Di Sandakan, UMS	
3.	External Examiner	Hamidah binti Mat	Pembinaan Modul Kemahiran Proses Sains Dengan Soalan Aras Tinggi Berasaskan Didik Hibur Tahun 5 Dan Keberkesanannya, UPSI	2018

## PUBLICATIONS

Summary	
ISI Article/Journal	4
Scopus Article/Journal	14
Non-Indexed Article/Journal	43
Indexed Conference Proceedings	16
Non- Indexed Conference Proceedings	15
Conference paper	31
Non-Indexed Book Chapters	5
Indexed Book Chapters	2
Original Book	1
Article in Mass Media	21
Modules	4
Thesis	1
Classified/Technical /Expert Report	0
Policy Paper	0

## JOURNAL (WOS)

No	Article title	Journal Title	ISSN	Vol	Issue	Page	Publication year	IF	Type of publication	Category of Publication	Quartile Ranking	Category Author
1	Abdullah, A.H, Julius, E, Suhairom, N., Ali, M., <b>Talib, C.A.</b> , Ashari, Z.M., Kohar, U.H.A., Abd Rahman, S.N.S. (2022). Relationship between Self-Concept, Emotional Intelligence and	Sustainability	2071 - 1050	14	21	1-22	2022	<b>3.9</b>	Indexed article journal	Web of Science	-	Co-author

	Problem-Solving Skills on Secondary School Students' Attitude towards Solving Algebraic Problems											
2	Phang, F.A., Roslan, A.N., Zakaria, Z.A., Zaini, M.A.A., Pusppanathan, J., <b>Talib, C.A.</b> (2022) Environmental Awareness in Batik Making Process	Sustainability	2071 - 1050	14	10		2022	3.9	Indexed article journal	Web of Science	-	Co-author
3	<b>Talib, C.A.</b> , Aliyu, F, Malik, A.M.B. Siang, K.H. (2019) Enhancing Students' Reasoning Skills in Engineering and Technology through Game-Based Learning	International Journal Of Emerging Technologies In Learning	1863 - 0383	14	24	69-80	2019	1.13	Indexed article journal	Web of Science	2	First Author
4	Ali, M., Surif, J., Abdullah, A.H., Ibrahim, N.H., <b>Talib, C.A.</b> , Shukor, N.A., Abd Halim, N.D., Ali, D.F., Suhairom,	Advanced Science Letter	1936 - 6612	24	11	8476 - 8479	2018	-	Indexed article journal	Web of Science	-	Co-author

N. (2018)The Pattern of Physics Problem Solving Between More Successful and Less Successful from Metacognitive Perspective												
--	--	--	--	--	--	--	--	--	--	--	--	--

### JOURNAL (SCOPUS)

No	Article title	Journal Title	ISSN	Vol	Issue	Page	Publication year	IF	Type of publication	Category of Publication	Quartile Ranking	Category Author
1	<b>Talib, C.A.</b> , Aliyu, F., Malik, A.M.A., Kang, H.S., Chin, C.K., Ismail, M.E., & Samsudin, M.A. Effect Of Design Thinking To Develop Marine And Coastal Environmental Attitudes	Journal of Sustainability Science and Management	2672 7226	18	4	14- 28	2023		Indexed article journal	Scopus		First author
2	Aliyu, J., Osman, S., Kumar, J. A., <b>Talib, C. A.</b> , & Jambari., H. (2022) Students' Engagement Through Technology And	International Journal Of Learning And Development	2164 - 4063	12	3	23- 40	2022	0.72	Indexed article journal	ERA		Co-author

	Cooperative Learning: A Systematic Literature Review											
3	Tan, Wee-Ling, Samsudin, M. A., Ismail, M. E., Ahmad, N. J., & <b>Talib, C. A.</b> (2021) Exploring the Effectiveness of STEAM Integrated Approach via Scratch on Computational Thinking	Eurasia Journal of Mathematics, Science and Technology Education	1305 8215	17	12	2-19	2021	-	Indexed article journal	Scopus	2	UTM first author
4	Bunyamin, M.A.H., <b>Talib, C. A.</b> , Ahmad, N. J., Ibrahim, N. H., & Surif, J. (2020). Current teaching practice of physics teachers and implications for integrated STEM education	Universal Journal of Educational Research	2332 3205	8	5A	18-28	2020	-	Indexed article journal	Scopus	-	Co-author
5	Wong, P. W., Ismail, N., Ali, M. Osman, S., & <b>Talib, C. A.</b> (2020) Application of Sakamoto math	ASM Science Journal	1823 6782	13	25	1-6	2020	-	Indexed article journal	Scopus	4	Co-author

	method in solving mathematical word problems for year 5 pupils											
6	Aliyu, F., & <b>Talib, C. A.</b> (2020). Integration of augmented reality in learning chemistry: A pathway for realization of industrial revolution 4.0 goals	Journal Of Critical Reviews	2394 5125	7	7	854- 859	2020		Indexed article journal	Scopus	-	Corresponding author
7	Samat, N.A.A., Ibrahim, N.H., Surif, J., Ali, M., Abdullah, AH. H., <b>Talib, C.A.</b> , & Bunyamin, M.A.H.(2019). Chem-A Module Based On STEM Approach In Chemical Bond	International Journal Of Recent Technology And Engineering (IJRTE)	2277 - 3878	7	6S5	700- 710	2019	-	Indexed article journal	Scopus	-	Co-author
8	Aliyu, F., & <b>Talib, C.A.</b> (2019). Virtual chemistry laboratory: A panacea to problems of conducting chemistry practical at science secondary schools	International Journal of Engineering and Advanced Technology	2249 8958	8	5	544- 549	2019	-	Indexed article journal	Scopus	-	Corresponding author

	in Nigeria											
9	Loganathan, P., Alwi, A. M., Romainor., N., <b>Talib, C.A.</b> , Hanri, C., Malik, A.M.A., & Kang, H. S.(2019) Students' Chemistry Learning Process Through Visual Programming Language: A Preliminary Study	Journal Of Recent Technology And Engineering	2277 3878	8	1C2	509-514	2019	-	Indexed article journal	Scopus	-	Corresponding author
10	Kamaruddin, N.F., Ibrahim, N.H., Surif, J., Ali, M., <b>Talib, C.A.</b> , & Ismail, N. (2019) Malaysian science stream students' anxiety towards chemistry at the secondary school level	International Journal of Recent Technology and Engineering	2277 3878	7	6	724-738	2019	-	Indexed article journal	Scopus	-	Co-author
11	<b>Talib, C.A.</b> , Aliyu, H., Malik, A.M.A., Kand, H.S., Novopashenny, I., & Ali, M. (2019). Sakai: A mobile learning platform	International Journal of Interactive Mobile Technologies	1865 7923	13	11	95-110	2019	-	Indexed article journal	Scopus	<b>3</b>	First author
12	Oversby, J., Sanders, J., <b>Talib, C.A.</b> , Ng, K.T., & Esa, N. (2019). Question generating	Eurasia Journal of Mathematics, Science and Technology Education	1305 8215	15	5	em17 09	2019	-	Indexed article journal	Scopus	2	UTM first author

	supported by blended learning platform: Issues of social justice for environmental education											
13	Ali, M., <b>Talib, C.A.</b> , Ibrahim, N.H., Abdullah, A.H., Surif, J., Zaid, N.M., & Ismail, N. (2017) The Differences In Solutions To Context Rich Physics Problems Between More And Less Successful Students	Man In India	0025 1569	97	17	171- 184	2017	-	Indexed article journal	Scopus	-	Co-author
14	Abdullah, N., Surif, J., Ibrahim, N.H., Halim, N.D.A., <b>Talib, C.A.</b> & Ismail, N.(2017) Secondary school students' alternative frameworks on the concept of condensation at the submicroscopic level	Man In India	0025 1569	97	12	363- 373	2017	-	Indexed article journal	Scopus	-	Co-author

TYPE: Non-indexed journal			
NO	TITLE	YEAR	AUTHOR
1	A systematic review of 21st-century chemistry laboratory experiments and classroom instructions facilitated/aided with digital technologies and e-resources. International Journal of Current Education Studies(IJCES), 2(1), 18-36 ( <b>UTM first author</b> )	2023	Aliyu, H.& <b>Talib, C.A.</b>
2	Digital Technology Approach In Chemistry Education: A Systematic Literature Review, Journal of Natural Science and Integration, 6(1), 1-13 ( <b>UTM first author</b> ).	2023	Ali, S., <b>Talib, C.A.</b> Jamal, A.M.
3	A Survey of Professionalism Traits among Education Students in Public University, Sains Humanika, 15(2), 1–13. ( <b>Corresponding author</b> )	2023	<b>Talib, C.A.</b> , Habibah. A.R, Phang, F. A., Talib, R., & Hakim, N. W.A
4	Scratchtopia Challenge: From Science Experiment to Coding in Upper Primary School, Learning Science and Mathematics, 1(17), 79-88. ( <b>First author</b> )	2022	<b>Talib, C.A.</b> , Tang , K.S., Hakim, N.W.A., Ng, K.T., Hermita, N., Ali,M. & Ong, E.T
5	How Relevant Social Media As Educational Tools: Systematic Review, Journal of Positive School Psychology, 6(8), 2796-2817. ( <b>Corresponding author</b> )	2022	Ghani, N.A., <b>Talib, C.A.</b> , &Suratin, M.N.M.
6	Best Practices and Challenges in Implementing Healthy Food Environment at School Setting toward Prevention of Obesity in Indonesia and Malaysia, Macedonian Journal of Medical Sciences,12(10(E)), 1050-1054 ( <b>UTM first author</b> )	2022	Mahmudiono, T., Vidianinggar, M.A., Elkarima, E., Lioni, E., <b>Talib, C.A.</b>
7	Developing Conceptual and Procedural Knowledge/Skills of Lifelong Learners from Basic to Advance Learning: Exemplars, Challenges and Future Direction, Dinamika Jurnal Ilmiah Pendidikan Dasar, 14(1),..22-35 ( <b>UTM first author</b> )	2022	Ng, K.T, Jamaludin, J., Pang, Y.J., Choong,C.,, Lay, Y.F., Ong, E.T., Durairaj, K., <b>Talib, C.A.</b> , & Chee, K.C.
8	Enhancing Cognitive Development in Learning Chemical Symbol and Periodicity through Instructional Game, International Journal of Asian Education, 2(3),.285-295 ( <b>UTM first author</b> )	2021	Aliyu, H., Raman, Y., & Talib, C.A.
9	Online Formative Assessment in Higher STEM Education; A Systematic Literature Review, Asian Journal of Assessment in Teaching and Learning, 11 (1),.47-62. ( <b>UTM first author</b> )	2021	Solomon, M.M., <b>Talib, C.A.</b> & Ibrahim, N.H.
10	A Preliminary Study for Designing and Developing Augmented Reality-Based Module for Teaching Chemical Bonding in Nigerian Secondary Schools, Solid State Technology, 63(1s), 638-647 ( <b>UTM first author</b> )	2020	Aliyu, F., <b>Talib, C.A.</b> , Aliyu, H., Mani, B.U., Kang, M.S., & Siow, C.L.
11	Integration of Computational Thinking Skills in Teaching and Learning Programming using the EZ-Prog among Matriculation Student, Solid State Technology, 63(1s), 670-679 ( <b>UTM first author</b> )	2020	Siti Nordianah Hai Hom, Corrienna Abdul Talib
12	Predominant Chemical Substances Causing Environmental Degradation as a Result of Climate Change: A Systematic Review, Solid State Technology, 63(1s), 704-720 ( <b>UTM first author</b> )	2020	Aliyu, H., <b>Talib, C.A.</b> , Aliyu, F., Malik, A.M.A., Ali, A., & Hom, S.N.H.

13	The Representation of Elementary Student at Cross-Age About Physics Phenomenon Solid State Technology, 63(1s), 755-766 <b>(UTM first author)</b>	2020	Anggoro, S., Arshad, N.I., <b>Talib, C.A.</b> , & Fitriati, A.
14	Integration of Robotics into STEM Education for Facilitating Environmental Sustainability, Solid State Technology, 63(1s), 767-783 <b>(Corresponding author)</b>	2020	<b>Talib, C.A.</b> , Aliyu, H., Aliyu, F, Malik, A.M.A., Anggoro, S., & Ali, M.
15	Preservice Elementary Teachers' Nature of Science Courses: Explicit, Implicit, or...? International Journal of Advanced Science and Technology 29(6), 3745 - 3753 <b>(UTM first author)</b>	2020	Anggoro, S., Hawanti, S., Arshad, N.I. , <b>Talib, C.A.</b> , Fitriati, A., & Hermita, N.
16	Systematic Literature Review On Higher Order Thinking In Chemistry, Buletin Persatuan Pendidikan Sains Dan Matematik Johor (PPSMJ), 1(29), 91-102 <b>(Co-author)</b>	2020	Low S., Yu, X., Ibrahim, N.H., <b>Talib, C.A.</b> , Huri, M.A.M., Mokhter, M.A.
17	Problem-Based Learning (PBL) As An Assessment Tool In Science Education: A Systematic Review With Exemplars, Learning Science And Mathematics Journal, 15, 100-116 <b>(corresponding author)</b>	2020	Alwi, A.M., <b>Talib, C.A.</b> , Aliyu, F., Ng, K.T., Anggoro, S., & Ali, M.
18	The TIMSS Grade 8 Students Science Achievement: A Comparative Study Between Malaysia, Singapore And Japan, Learning Science And Mathematics Journal, 15, 147-156 <b>(corresponding author)</b>	2020	Serman, S.N., <b>Talib, C.A.</b> , Aliyu, F., & Ali, M
19	Science Teachers's Self-Confidence On Integrating Computational Thinking Into Classroom Pedagogies For Teaching And Learning, Learning Science And Mathematics, 15, 56-71 <b>(UTM first author)</b>	2020	Ramin, N., <b>Talib, C.A.</b> , Aliyu, H., Ali, M., & Hermita, N.
20	Teaching And Learning Chemistry Using Smartphones, Innovative Teaching And Learning Journal (ITLJ), 4(1),18-28 <b>(Corresponding author)</b>	2020	Arumugam, P., <b>Talib, C.A.</b> , & Aliyu, F.
21	Assessment Of Using Ez-Prog: An Easy Color Schematic Model For Programming Problem Solving, Asean Journal Of Teaching And Learning In Higher Education, 1(4), 31-41 <b>(UTM first author)</b>	2020	Hom, S.H.S., Ibrahim, H.H., Ibrahim, A. Mokhsin, M., & <b>Talib, C.A.</b>
22	Case Study: Students Achievement In Chemistry, Technology, Engineering And Mathematics (CTEM) At Urban Schools, Dinamika Jurnal Ilmiah Pendidikan Dasar, 1(12), 15-24. <b>(UTM first author)</b>	2019	Jye, S.S., <b>Talib, C.A.</b> & Aliyu, A.
23	Literature Review Use Of Technology And Simulation In Teaching And Learning Chemistry, Buletin PPSMJ, 1(27), 6-21. <b>(UTM first author)</b>	2019	Sim, S.J., <b>Talib, C.A.</b> , Hanri, C., Ali, M., Bunyamin, M.A.H.
24	Interest, Attitude, And Achievement In Organic Chemistry: A Case Study Among Undergraduates Students, 1(27), 2-7 Technology And Simulation In Teaching And Learning Chemistry Buletin PPSMJ, 1(27), 6-21. <b>(UTM first author)</b>	2019	Khalik, M., Romainor, N., , Lukmanulhakin, N.M.J.N., <b>Talib, C.A.</b> , Aliyu, F., Ali, A., Bunyamin, M.A.H.
25	Limiting Learning Science And Mathematics Journal Factors Among Teachers To Use Graphic Calculator In Their Teaching And Learning, 14, 23-33. <b>(UTM first author)</b>	2019	Arumugam, P., <b>Talib, C.A.</b> , Hakim, N,W.A.
26	Dominant Instructional Practices And Their Challenges Of Implementation Integrated STEM Education: A Systematic Review With The Way Forward, Learning Science And	2019	Khalik, M., <b>Talib, C.A.</b> , & Aliyu, H.

	Mathematics Journal, 14, 92-103 <b>(Co-author)</b>		
27	Implementing Technology Infused Gamification In Science Classroom Systematic Review And Suggestion For Future Research, Learning Science And Mathematics Journal, 14, 60-73. <b>(UTM first author)</b>	2019	Loganathan, P., <b>Talib, C.A.</b> , & Ng, K.T., Aliyu, F., & Zawadzki, R.
28	STEAM Teaching Strategies In Related Subject, Education, Sustainability & Society (ESS), 4(2), 14-18. <b>(UTM first author)</b>	2019	<b>Talib, C.A.</b> , Rafi, I.B.M., Rajan, S.T., Hakim, N.W.A., Ali, M., & Ng, K.T.
29	Undergraduates' Interest Towards Learning Genetics Concepts Through Integrated STEM problem Based Learning Approach, Journal Of University Of Shanghai For Science And Technology, 12(22), 1125-1150. <b>(UTM first auhor)</b>	2019	Rahim, S.P.A., Samsudin, M.A., Ismail, M.E., <b>Talib, C.A.</b> , & Amiruddin, M.H.
30	Penggunaan Sumber Ict Dalam Pengajaran Kimia : Cabaran Kepada Guru Masa Kini, Innovative Teaching And Learning Journal, 12(2), 82-88 <b>(Corresponding author)</b>	2019	Nor, N.M., <b>Talib, C.A.</b> , Hakim, N.W.A., Ali, M., Osman, S., & Ibrahim, N.H.
31	Integrating Values-Based Environmental Education With Technology-Enhanced Learning: Case Exemplars In The Seameo Region And Beyond, Learning Science And Mathematics Journal, 13, 133-152. <b>(UTM first author)</b>	2019	Parahakaran, S., Weisheit, E., Ng, K.T., & <b>Talib, C.A.</b>
32	Developing Interest In STEM Through Mentor Mentee Program, Learning Science And Mathematicss Journal, 14, 46-58. (Co-author)	2018	Ali, M. & <b>Talib, C.A.</b>
33	Implementation Of Inquiry - Based Science Education: Issues, Exemplars And Recommendations, Learning Science And Mathematics Journal, 13, 115-132 <b>(UTM first author)</b>	2018	Khalik, M., <b>Talib, C.A.</b> , & Rafi, I.B.M.
34	The Necessity Of Computational Thinking In Stem Education: An Analysis With Recommended Research, Learning Science And Mathematics Journal, 13, 1-12 <b>(UTM first author)</b>	2018	Romainor, N., <b>Talib, C.A.</b> , & Hakim, N.W.A.
35	Is Sakai Online Visual Learning Suitable For Cultivating Thinking Skills In Malaysia's Higher Education? Learning Science And Mathematics Journal, 13, 87-97. <b>(corresponding author)</b>	2018	<b>Talib, C.A.</b> , Aliyu, H., Ali, M., Malik, A.M.A., & Kang, H.S.
36	Hubungan Antara Gaya Kognitif Dengan Tahap Kefahaman Kemahiran Manipulatif Pelajar Fizik Sekolah Menengah, Buletin PPSMJ, 1(27), 19-31. <b>(Co-author)</b>	2018	Bunyamin, M.A.H., <b>Talib, C.A.</b> , Ali, M. Istiqomah, H.F.N.
37	A Mini Review On Informal STEM Education: Elements, Impacts And Future Prospects, Buletin PPSMJ, 1(27), 2-16.(co-author)	2018	Zailan, N.A., Bunyamin, M.A.H., & <b>Talib, C.A.</b>
38	Video-Based Learning In Chemistry Education: Exemplars, Issues And Challenges, Learning Science And Mathematics, 12, 1-17. <b>(UTM first author)</b>	2017	<b>Talib, C.A.</b> , Baharuddin, N.S., Ali, M., Ng, K.T., Zawadzki, R., Aliyu, H.
39	Enhancing Critical Thinking Through Project Based Learning:Analysis Of A Systematic Review, Malaysian Journal Of Higher Order Thinking Skills In Education, 2, 122-141 <b>(Corresponding author)</b>	2017	Hakim, N.W.A., & <b>Talib, C.A.</b>

40	Applying The Rasch Model To Evaluate The Effectiveness Of Incorporating Multiple Intelligences Theory In Informal Science Learning Using The Mobile Science Lab Program, International Journal Of Creative Futures And Heritage, 1(3), 103-123 <b>(UTM first author)</b>	2017	Samsudin, M.A., <b>Talib, C.A.</b> , & Haniza, N.H.
41	Penggunaan Kalkulator Grafik Dalam Pendidkan Sains, Buletin PPSMJ, 1(27), 14-21 <b>(UTM first author)</b>	2017	<b>Talib, C.A.</b> , & Ali, M
42	Penilaian Modul Berasaskan Web Pro-Mc Physics Dari Aspek Kefungsian, Buletin PPSMJ, 1(27), 22-35. <b>(Co-author)</b>	2017	Ali, M., Surif, J., Abdullah, A.H., Ibrahim, N.H., <b>Talib, C.A.</b> & Saim, S.
43	The Importance Of Monitoring Skills In Physics Problem Solving, European Journal of Educational Studies, 1(3), 1-10	2015	Ali, M., <b>Talib, C.A.</b> , Ibrahim, N.H, Surif, S. & Abdullah, A.H.
<b>TYPE: Indexed Proceedings/Conference</b>			
<b>NO</b>	<b>TITLE</b>	<b>YEAR</b>	<b>AUTHOR</b>
1	The effectiveness of learning STEM out of the classroom on the interest & career options, AIP Conference Proceedings, 2673,100002 <b>(Co-author)</b>	2023	Ali, M., Talib, C.A., Parno, P., Aspin, S.H., Surif, J.
2	Online Project-Based Learning With Integration Of STEAM In Chemistry: Challenges And Opportunities To Create 21st Century Skills, 2542, 1-6, AIP Conference Proceedings, 4th International Conference On Science And Science Education (IConSSE 2021): Integrating Rapid Technology and Whole Person Education in Science and Science Education to Encounter the New Normal Era, 7–8 September 2021 Salatiga, Indonesia <b>(Corresponding Author)</b>	2022	<b>Talib, C.A.</b> , Ramin, N., Rajan, S.T., Aliyu, F., Surif, J., Ibrahim, N.H., & Hanri, C
3	Model For The Formation Of Students' Interest In STEM Through Geometry Learning Based On Visual Spatial Abilities Using Augmented Reality Technology, AIP Conference Proceedings, 2633(1), 030006. <b>(Co-author)</b>	2022	Adnan, N.A.S., Osman, S., Kumar, J.A., Jambari, H., <b>Talib, C.A.</b>
4	Dub Chem Vid Module For Chemistry Topic Abstract AIP Conference Proceedings, 2542,1-9. 4th International Conference On Science And Science Education (IConSSE 2021): Integrating Rapid Technology and Whole Person Education in Science and Science Education to Encounter the New Normal Era, 7–8 September 2021 Salatiga, Indonesia <b>(Co-author)</b>	2022	Ahamad, M.K.A., Ibrahim, N.H., Surif, J., Nursiwan, W.A., Hanri, C., Osman, S., Nawi, N.D., <b>Talib, C.A.</b>
5	Teacher's Perception Of Student Worksheets STEM Based Mikir Approach On Periscope Project,373-376, IEEE proceedings, 2021 Universitas Riau International Conference on Education Technology (URICET 2021), Pekanbaru, Indonesia, 14 – 15 October 2021 <b>(UTM first author)</b>	2021	Alim, J.A., Mardita, M., Hermita, N., Putra, Z.H., <b>Talib, C.A.</b> , Fauza, N., Wijaya, T.T., Dipuja, D.A., & Alim, M.L.
6	Digital Technology in STEM Education: Coding and Programming as a Base-line, Prosiding Seminar Nasional Pendidikan IPA II "Optimalisasi Literasi Digital melalui Pendekatan STEM", 1,1-14 <b>(First author)</b>	2021	<b>Talib, C.A.</b> , Aliyu, F & Ramlawati

7	Web-Based Learning In The Higher Institution Of Learning: Web 2.0 Application Innovations And Challenge,1-6. IEEE Proceedings, 2021 Universitas Riau International Conference on Education Technology (URICET 2021) Pekanbaru, Indonesia, 14 – 15 October 2021 <b>(UTM first author)</b>	2021	Aliyu, F., <b>Talib, C.A.</b> , Alim, J.A., Hermita, N.
8	Developing Digital Interactive on Heat Transfer Concept for Elementary Students. 2021 IEEE International Conference on Educational Technology, ICET 2021 57-61 <b>(UTM first author)</b>	2021	Hermita, N., Gusti, P. M., Alim, J. A. Putra, Z. H., Wijaya, T. T. & <b>Talib C.A.</b>
9	Developing Student's Computational Thinking through Graphic Calculator in STEAM Education, In AIP Conference Proceedings, 030003. AIP Publishing LLC. <b>(first author)</b>	2019	<b>Talib, C.A.</b> , Aliyu, H., Zawadzki, R., Ali, M.
10	Interactive Courseware as an effective strategy to overcome misconceptions in Acid-base Chemistry. Proceedings of the 2018 IEEE 10th International Conference on Engineering Education, ICEED 2018 8626941, 240-245 <b>(first author)</b>	2019	<b>Talib, C.A.</b> ,Aliyu, H., Malik, A.M.A., Siang, K.H.,Ali, M
11	Gender Difference As A Factor In Fostering Scientific Reasoning Skill Among Students, Proceedings of the 2018 IEEE 10th International Conference on Engineering Education, ICEED 2018, 8626888, 54-58 <b>(first author)</b>	2019	<b>Talib, C.A.</b> , Rajan, S.T., Abd Hakim, N.W., Malik, A.M.A., Siang, K.H., Ali, M.
12	Effect of STEM competition on STEM career interest Proceedings of the 2018 IEEE 10th International Conference on Engineering Education, ICEED 2018 8626904, 111-116. <b>(co-author)</b>	2019	Ali, M., Surif, J., Abdullah, A.H., <b>Talib, C.A.</b> , Ibrahim, N.H
13	The Effectiveness of a Mentor-Mentee Program on Malaysian School Students' Interest in STEM. Proceedings of 2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering, TALE 2018, 8615161, 855-860 <b>(co-author)</b>	2019	Ali, M., Surif, J., Zaid, N.M., <b>Talib, C.A.</b> , Abdullah, A.H., & Ibrahim, N.H.
14	River Water Quality Study and Environmental Quality Assessment for Schools in North America, Proceedings - 2017 7th World Engineering Education Forum, WEEF 2017- In Conjunction with: 7th Regional Conference on Engineering Education and Research in Higher Education 2017, RCEE and RHEd 2017, 1st International STEAM Education Conference, STEAMEC 2017 and 4th Innovative Practices in Higher Education Expo 2017, I-PHEX 2017, 8467043, 877-881. <b>(UTM first author)</b>	2018	Zawadzki, R., <b>Talib, C.A.</b> , & Burrell, B.L.
15	Effects of Using Multi-vid Ruler Kit in the Acquisition of Numeracy Skills among PROTIM Student. AIP Conference Proceedings, 1870,070002 Of The 24th National Symposium On Mathematical Sciences (Sksm24): Mathematical Sciences Exploration For The Universal Preservation <b>(Corresponding author)</b>	2017	Arumugan, H.A.P., Obeng, S.N.W., <b>Talib, C.A.</b> Bunyamin, M.A.H. Ali, M., Ibrahim, N., Zawadzki, R.
16	Web Pro-Mc Physics as a Support Tool For Improving Physics Problem Solving SkillsIEEE International Conference on Game Physics and Mechanics (GAMEPEC) <b>(Co-author)</b>	2015	Ali, M., Ibrahim, N.H., Abdullah, A.H., Surif, J., <b>Talib, C.A.</b> , Saim, N.
<b>TYPE: Non-Indexed Proceedings/Conference</b>			

NO	TITLE	YEAR	AUTHOR
1	Efficiency Of Web-Based, Computer And Mobile Software Applications In Facilitating Teaching And Learning Of Chemical Concepts. Bilisel International World Science And Research Congress, 24/25 June 2023, Istanbul/Turkey <b>(UTM first author)</b>	2023	Aliyu, H., & <b>Talib, C.A</b>
2	Reflective Thinking in Chemistry Laboratory Activities: An Experimental Learning Study, 18, Proceedings of the 8th International Conference on Research Innovations (iCRI'23), 23-24 June, Manila, Philiphines <b>(First author)</b>	2023	<b>Talib, C.A.</b> , Shirazi, T., Hermita, N., & Ahmad, N.J.
3	The Development of Science Electronic Module Based on Socio Scientific Issues (SSI) for Global Warming, 19, Proceedings of the 8th International Conference on Research Innovations (iCRI'23), 23-24 June, Manila, Philiphines <b>(UTM first author)</b>	2023	Ikhsan, M., Permana, N.D., Zarkasih, Susilawati, Diniya, Ilhami, A., Syarif, M.I., & <b>Talib, C.A.</b>
4	Scibog: A Game in Human Body Chemistry, 22, Proceedings of the 8th International Conference on Research Innovations (iCRI'23), 23-24 June, Manila, Philiphines <b>(First author)</b>	2023	<b>Talib, C.A.</b> , Shamsudin, N.M., Alias, N.F., Mohamad, S.N.A., Herman, S.H., Talib, F.E.A., Ali, M., Permana, N.D.
5	Online Learning Science through STEAM based on the Local Wisdom, Proceedings of the 1st International Conference on Social Sciences, ICONESS 2021, 19 July 2021, Purwokerto, Central Java, Indonesia <b>(First author)</b>	2021	<b>Talib, C.A.</b> , Aliyu, F., Anggoro, S.
6	Scratchtopia Challenge: From Science Experiment To Coding. New Academia Learning Innovation (Nali) 2020 Symposium, 7-10 November 2020, UTM, Johor <b>(UTM first author)</b>	2020	<b>Talib, C.A.</b> , Ali, M., Hanri, C., Ibrahim, N. H., & Surif, J.
7	The Impact of Formative Assessment on High Achievers and Low Achievers – A Systematic Review, Proceeding Universitas Muhammadiyah Surabaya, pp1-10 <b>(Corresponding author)</b>	2020	Loganathan, P., <b>Talib, C.A.</b> , Zawadzki, R., Aliyu, F., Ali, M., & Ibrahim, M.I.
8	Integration Of Computational Thinking Skills In Teaching And Learning Programming Using Ez-Prog Among Matriculation Student, 57, Proceedings of the 5th International Conference on Management, Engineering, Science, Social Science and Humanities, 14-15 August, Penang <b>(UTM first author)</b>	2020	Hom, S.N.H, & <b>Talib, C.A.</b>
9	Integration of Robotics into STEM Education for Facilitating Environmental Sustainability, 59, Proceedings of the 5th International Conference on Management, Engineering, Science, Social Science and Humanities, 14-15 August, Penang <b>(UTM first author)</b>	2020	<b>Talib, C.A</b> , Aliyu, H., Aliyu, F., Mani, B.U., Malik, A.M.A., Ali, A., Kang, H.S., Siow, C.L., Anggoro, S., & Ali, M.
10	A Preliminary Study For Designing And Developing Augmented Reality-Based Module For Teaching Chemical Bonding In Nigerian Secondary Schools, 56, Proceedings of the 5th International Conference on Management,	2020	Aliyu, F., Talib, C.A., & Aliyu, H.

	Engineering, Science, Social Science and Humanities, 14-15 August, Penang (UTM first author) <b>(UTM first author)</b>		
11	Computational Thinking, Digital Technology & Engineering Education, 46-47, Proceedings of the 5th International Conference on Management, Engineering, Science, Social Science and Humanities, 14-15 August, Penang <b>(Single author)</b>	2020	<b>Talib, C.A.</b>
12	Predominant Chemical Substances Causing Environmental Degradation As A Result Of Climate Change: A Systematic Review, .57, Proceedings of the 5th International Conference on Management, Engineering, Science, Social Science and Humanities, 14-15 August, Penang <b>(UTM first author)</b>	2020	Aliyu, H., <b>Talib, C.A.</b> , Aliyu, F., Malik, A.M.A., Kang, H.S., & Ali, A.
13	Perbandingan Program Sarjana Pendidikan Campuran Di Beberapa Universiti Awam Malaysia <b>(Co-author)</b>	2020	Ibrahim, N.H., Samah, N.A., Phang. F.A., Kosnin, A., Hashim, A.H.M., & <b>Talib,C.A.</b>
14	Pembelajaran Aktif Secara Dalam Talian Menggunakan Whatsapp. New Academia Learning Innovation (Nali) 2020 Symposium. <b>(Co-author)</b>	2020	Ali, M., <b>Talib, C.A.</b> ,& Ibrahim, N.H.
15	Virtual Reality Technology: What Benefits for Nigerian Pre-service Chemistry Teachers. Asia Proceedings of Social Sciences, 4(3), 66–68. <b>(UTM first author)</b>	2019	Aliyu, F. & <b>Talib, C.A.</b>
<b>TYPE: Thesis</b>			
<b>NO</b>	<b>TITLE</b>	<b>YEAR</b>	<b>AUTHOR</b>
1	The Effect Of Process-Oriented Guided-Inquiry Learning On Students' Scientific Inquiry Literacy Skills And Students' Achievement In Chemistry <b>(Author &amp; Researcher)</b>	2014	<b>Talib, C.A</b>
<b>TYPE: Original Book</b>			
<b>NO</b>	<b>TITLE</b>	<b>YEAR</b>	<b>AUTHOR</b>
1	Problem And Strategies: Chemistry Beyond The Classroom <b>(UTM First author)</b>	2018	<b>Talib, C.A &amp; Ali, M.</b>
<b>TYPE: Modules/ Guidelines</b>			
<b>NO</b>	<b>TITLE</b>	<b>YEAR</b>	<b>AUTHOR</b>
1	GamBot (Educational Game Mobile Robot) <b>(Single author)</b>	2022	<b>Talib, C.A</b>

2	Module - Design Thinking for IR4.0 Professionals <b>(Co-author)</b>	2021	Kohar, U.H.A., <b>Talib, C.A.</b> , Adam, S.
3	Computational Thinking for Problem Solving <b>(Single author)</b>	2021	<b>Talib, C.A</b>
4	Scratchtopia Challenge: From Science Experiment to Coding <b>(Single author)</b>	2019	<b>Talib, C.A</b>
<b>TYPE: Non Indexed Book Chapter</b>			
NO	TITLE	YEAR	AUTHOR
1	Keberkesanan Pembelajaran STEM Luar Bilik Darjah Terhadap Sikap Dan Minat, In Abdullah, A.H. & Ibrahim, N.H.(Eds). Hala Tuju Pendidikan STEM di Malaysia, Johor, Malaysia: Universiti Teknologi Malaysia <b>(co-author)</b>	2022	Ali, A. & <b>Talib, C.A</b>
2	Fostering Thinking Skills Of Secondary Students Through Blended Mode Problem-Based Learning (PBL) In Studying About Matter In Chemistry. In Corrienna Abdul Talib & Marlina Ali (Eds). Problem And Strategies: Chemistry Beyond The Classroom, Johor, Malaysia: Universiti Teknologi Malaysia <b>(UTM first author)</b>	2018	Ng. K.T., Lay, Y.F., & <b>Talib, C.A.</b>
3	Corporate Social Responsibility And Chemistry Education. In Talib, C.A., & Ali, M. (Eds). Problem And Strategies: Chemistry Beyond The Classroom, Johor, Malaysia: Universiti Teknologi Malaysia. <b>(First author)</b>	2018	<b>Talib, C.A.</b> , Bakar, H.A., Azha',S., Ng, K.T., Ahmad, N.J., Zawadski, R., Ali,M., & Bunyamin, M.A.H.
4	Penggunaan Komputer Dan Pencapaian Sains Dan Matematik Dalam TIMSS 2007: Satu Kajian Kompratif Di Antara Malaysia Dan Singapura. In Nor Hasniza Ibrahim & Marlina Ali (Eds), Inovasi Dan Kreativiti Dalam Pengajaran Dan Pembelajaran Sains, Johor, Malaysia: Universiti Teknologi Malaysia. <b>(UTM first author)</b>	2018	Mapeala, R., Lay, Y.F., & <b>Talib, C.A.</b>
5	Redifining Teaching And Learning Methods For Asian Communities To Inform Policy Changes Through Teleheal Collaborative Learning Platform. Learning Science And Mathematics Together (Lesmat) In A Borderless World Using Technology. In Ng Khar Thoe, Devadason Robert Peter, Lay Yoon Fah (Eds) Learning Science And Mathematics Together (Lesmat) In A Borderless Work Using Technology, Pulau Pinang, Malaysia: Seameo Recsam <b>(UTM first author)</b>	2015	Parahakaran, S., Yusof, S.M., Hong, Soon, C.Y., Toh, L., <b>Talib, C.A.</b> , Ng, K.T., & Khalid, M.S.
<b>TYPE: Indexed Book Chapter</b>			
NO	TITLE	YEAR	AUTHOR

1	Cyberbullying Awareness Through Sentiment Analysis Based on Twitter. In: Yafooz, W.M.S., Al-Aqrabi, H., Al-Dhaqm, A., Emara, A. (eds) Kids Cybersecurity Using Computational Intelligence Techniques. Studies in Computational Intelligence, vol 1080. Springer, Cham. <b>(UTM first author)</b>	2023	Ahmad, I.S., Darmawan, M.F., & <b>Talib, C.A.</b>
2	Industrial Revolution (IR) and Exemplary AR/VR-based Technological Tools in Preventive Health Education: The Past, Present, and Future. In: Kumar, R., Jain, V., Han, G.T.W., & Touzene, A. (eds) Immersive Virtual and Augmented Reality in Healthcare An IoT and Blockchain Perspective, Taylor & Francis Group <b>(UTM first author)</b>	2023 (inpress)	Ong, E.T, Pang, Y.J., <b>Talib, C.A</b> Setiawan, R., Ng, J.H., & Por, F.P.
3	Conserving environment using resources wisely with reduction of waste and pollution: exemplary initiatives for Education 4.0. In: Leong, W.Y. (ed) Human Machine Collaboration and Interaction for Smart Manufacturing: Automation, robotics, sensing, artificial intelligence, 5G, IoTs and Blockchain, IET Digital Library <b>(UTM first author)</b>	2022	Ng, K.T., Fukui, M., <b>Talib, C.A.</b> , Nomura, T., Chew, E.T., & Kumar, R.
<b>TYPE: Article in Mass Media</b>			
<b>NO</b>	<b>TITLE</b>	<b>YEAR</b>	<b>AUTHOR</b>
1	June, 15. Dr. Corrienna explores Environmental Science and fosters collaboration through Erasmus+ in Estonia. UTM NEWSHUB. <a href="https://news.utm.my/2023/06/utm-fssh-senior-lecturer-invited-to-tartu-estonia/">https://news.utm.my/2023/06/utm-fssh-senior-lecturer-invited-to-tartu-estonia/</a> <b>(Single author)</b>	2023	<b>Talib, C.A.</b>
2	June, 7. ChemThink Workshop Boosts Thinking Skills Among Chemistry Students. UTM NEWSHUB. <a href="https://news.utm.my/2023/06/chemthink-fssh-utm-successfully-conducted-thinking-skill-learning-approach-to-high-school-students/">https://news.utm.my/2023/06/chemthink-fssh-utm-successfully-conducted-thinking-skill-learning-approach-to-high-school-students/</a> <b>(Corresponding author)</b>	2023	Kow, Z.L., Shobri, N.N.S.M. & <b>Talib,C.A.</b>
3	Mei, 23. Bengkel inovasi tingkat kemahiran kreatif dan inovatif pelajar pendidikan kimia UTM. UTM NEWSHUB. <a href="https://news.utm.my/ms/2023/05/bengkel-inovasi-tingkat-kemahiran-kreatif-dan-inovatif-pelajar-pendidikan-kimia-utm/">https://news.utm.my/ms/2023/05/bengkel-inovasi-tingkat-kemahiran-kreatif-dan-inovatif-pelajar-pendidikan-kimia-utm/</a> <b>(Corresponding author)</b>	2023	Noralimin, M.A. & <b>Talib, C.A.</b>
4	January, 26. FSSH UTM anjur webinar telusuri pentaksiran amali, selari aspirasi pendidikan berkonsepkan Malaysia Madani. UTM NEWSHUB. <a href="https://news.utm.my/ms/2023/01/fssh-utm-anjur-webinar-telusuri-pentaksiran-">https://news.utm.my/ms/2023/01/fssh-utm-anjur-webinar-telusuri-pentaksiran-</a>	2023	Ibnuzaman, S.N.F.H., & <b>Talib, C.A.</b>

	amali-selari-aspirasi-pendidikan-berkonsepkan-madani/ ( <b>Corresponding author</b> )		
5	January , 1. FSSH Online Global Classroom mengetengahkan isu keselamatan makanan. UTM NEWSHUB. <a href="https://news.utm.my/ms/2023/01/fssh-online-global-classroom-mengetengahkan-isu-keselamatan-makanan/">https://news.utm.my/ms/2023/01/fssh-online-global-classroom-mengetengahkan-isu-keselamatan-makanan/</a> ( <b>Corresponding author</b> )	2023	Madlan, N. & <b>Talib, C.A.</b>
6	October, 25. UTM Julung Kali Anjurkan Pertandingan Rekacipta Bot Mesra OKU Peringkat Negeri Johor. UTM NEWSHUB. <a href="https://news.utm.my/ms/2022/10/utm-julung-kali-anjurkan-pertandingan-rekacipta-bot-mesra-oku-peringkat-negeri-johor/">https://news.utm.my/ms/2022/10/utm-julung-kali-anjurkan-pertandingan-rekacipta-bot-mesra-oku-peringkat-negeri-johor/</a> ( <b>Corresponding author</b> )	2022	<b>Talib, C.A.</b> & Shobri, N.N.S.M.
7	February, 9. Is Augmented Reality Suitable For Teaching And Learning In Institution Of Higher Education?. UTM NEWSHUB. <a href="https://news.utm.my/2020/02/is-augmented-reality-suitable-for-teaching-and-learning-in-institution-of-higher-education/">https://news.utm.my/2020/02/is-augmented-reality-suitable-for-teaching-and-learning-in-institution-of-higher-education/</a> ( <b>Corresponding author</b> )	2020	Aliyu, F., & <b>Talib, C.A.</b>
8	February, 6. Computational Thinking And STEAM Education. UTM NEWSHUB. <a href="https://news.utm.my/2020/02/computational-thinking-and-steam-education/">https://news.utm.my/2020/02/computational-thinking-and-steam-education/</a> ( <b>Corresponding author</b> )	2020	<b>Talib, C.A.</b> & Zawadzki, R.
9	November, 24. Engaging STEM Activities increase curiosity in Pineapple Town. UTM NEWSHUB. <a href="https://news.utm.my/2019/11/engaging-stem-activities-increase-curiosity-in-pineapple-town/">https://news.utm.my/2019/11/engaging-stem-activities-increase-curiosity-in-pineapple-town/</a> ( <b>Corresponding author</b> )	2019	Aliyu, F., & <b>Talib, C.A.</b>
10	October, 16. UTM STEM program making history in Malacca. UTM NEWSHUB. <a href="https://news.utm.my/2019/10/utm-stem-program-making-history-in-malacca/">https://news.utm.my/2019/10/utm-stem-program-making-history-in-malacca/</a> ( <b>Corresponding author</b> )	2019	Aliyu, F., <b>Talib, C.A.</b> & Zawadzki, R.
11	September, 9. Dr. Corrienna Abdul Talib Invited as Workshop Speaker at ASEAN Student Forum 2019 Universiti Teknologi Petronas. UTM NEWSHUB. <a href="https://news.utm.my/2019/09/dr-corrienna-abdul-talib-invited-as-workshop-speaker-at-asean-student-forum-2019-universiti-teknologi-petronas/">https://news.utm.my/2019/09/dr-corrienna-abdul-talib-invited-as-workshop-speaker-at-asean-student-forum-2019-universiti-teknologi-petronas/</a> ( <b>Corresponding author</b> )	2019	<b>Talib, C.A.</b> & Zawadzki, R.
12	August, 28. Lesson Learned as a Non-computer Scientist from Teaching a Course on Fundamentals of Computer Science Training for Trainers. UTM NEWSHUB. <a href="https://news.utm.my/2019/08/lesson-learned-as-a-non-computer-scientist-from-teaching-a-course-on-fundamentals-of-computer-science-training-for-trainers/">https://news.utm.my/2019/08/lesson-learned-as-a-non-computer-scientist-from-teaching-a-course-on-fundamentals-of-computer-science-training-for-trainers/</a> ( <b>Corresponding author</b> )	2019	<b>Talib, C.A.</b> & Zawadzki, R.

13	August, 22. The Educational Chemistry Laboratory Hosts STEAM Learning for Korean Students. UTM NEWSHUB. <a href="https://news.utm.my/2019/08/the-educational-chemistry-laboratory-hosts-steam-learning-for-korean-students">https://news.utm.my/2019/08/the-educational-chemistry-laboratory-hosts-steam-learning-for-korean-students</a> <b>(Corresponding author)</b>	2019	Aliyu, F., <b>Talib, C.A.</b> & Zawadzki, R.
14	August, 20. Scientific Creativity through STEM activities shake Polytechnic Mersing. UTM NEWSHUB. <a href="https://news.utm.my/2019/08/scientific-creativity-through-stem-activities-shake-polytechnic-mersing-2/">https://news.utm.my/2019/08/scientific-creativity-through-stem-activities-shake-polytechnic-mersing-2/</a> <b>(Corresponding author)</b>	2019	Aliyu, F., <b>Talib, C.A.</b> & Zawadzki, R.
15	August, 10. Augmented Reality: A New Learning Environment for Green Chemistry Unveiled at the RCE Iskandar Sustainable & Low Carbon Schools Exhibition 2019. UTM NEWSHUB. <a href="https://news.utm.my/2019/08/augmented-reality-a-new-learning-environment-for-green-chemistry-unveiled-at-the-rce-iskandar-sustainable-low-carbon-schools-exhibition-2019/">https://news.utm.my/2019/08/augmented-reality-a-new-learning-environment-for-green-chemistry-unveiled-at-the-rce-iskandar-sustainable-low-carbon-schools-exhibition-2019/</a> <b>(Corresponding author)</b>	2019	Aliyu, F., <b>Talib, C.A.</b> & Zawadzki, R.
16	July, 24. International Educational Visit Program from Universitas Negeri Jakarta. UTM NEWSHUB. <a href="https://news.utm.my/2019/07/international-educational-visit-program-from-universitas-negeri-jakarta/">https://news.utm.my/2019/07/international-educational-visit-program-from-universitas-negeri-jakarta/</a> <b>(Corresponding author)</b>	2019	Hakim, N.W.A., <b>Talib, C.A.</b> , & Zawadzki, R.
17	July, 18. UTM lecturers have a recognized expertise as STEAM-based program providers, a program aimed at creative young scientists. UTM NEWSHUB. <a href="https://news.utm.my/2019/07/utm-lecturers-have-a-recognized-expertise-as-steam-based-program-providers-a-program-aimed-at-creative-young-scientists/">https://news.utm.my/2019/07/utm-lecturers-have-a-recognized-expertise-as-steam-based-program-providers-a-program-aimed-at-creative-young-scientists/</a> <b>(Corresponding author)</b>	2019	Aliyu, F., <b>Talib, C.A.</b> & Zawadzki, R.
18	July, 18. Scratchtopia Challenge 2019: A Kick-Start Content Learning in Integrated Computational Thinking. UTM NEWSHUB. <a href="https://news.utm.my/2019/07/scratchtopia-challenge-2019-a-kick-start-content-learning-in-integrated-computational-thinking/">https://news.utm.my/2019/07/scratchtopia-challenge-2019-a-kick-start-content-learning-in-integrated-computational-thinking/</a> <b>(Corresponding author)</b>	2019	Shanmugan, P., <b>Talib, C.A.</b> , & Zawadzki, R.
19	May, 29. Highlighting 21st Century Skills through STEAM Program. UTM NEWSHUB. <a href="https://news.utm.my/2019/05/highlighting-21st-century-skills-through-steam-program/">https://news.utm.my/2019/05/highlighting-21st-century-skills-through-steam-program/</a> <b>(Corresponding author)</b>	2019	Aliyu, F., <b>Talib, C.A.</b> & Zawadzki, R.
20	May, 2. FSSH STEM Activity Sparked Science Students' Thinking through Discovery Learning. UTM NEWSHUB. <a href="https://news.utm.my/2019/05/students-learning-stem-activity-sparked-their-thinking-through-discovery/">https://news.utm.my/2019/05/students-learning-stem-activity-sparked-their-thinking-through-discovery/</a> <b>(Corresponding author)</b>	2019	<b>Talib, C.A.</b> , Aliyu, F., & Zawadzki, R.

21	May, 2. FSSH STEM expert invited as keynote speaker at STEMEIF 2019, Central Java, Indonesia. UTM NEWSHUB. <a href="https://news.utm.my/2019/05/fssh-stem-expert-invited-as-keynote-speaker-at-stemeif-2019-central-java-indonesia/">https://news.utm.my/2019/05/fssh-stem-expert-invited-as-keynote-speaker-at-stemeif-2019-central-java-indonesia/</a> ( <b>Single author</b> )	2019	<b>Talib, C.A.</b>
----	---	------	--------------------

**PLENARY/CHAIRPERSON/ORAL POSTER PRESENTER/KEYNOTE ADDRESS / INVITED GUEST SPEAKER**

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION
1	Plenary Speaker	Persidangan Kajian Tindakan, Penyelidikan dan Inovasi Guru Peringkat Kebangsaan	14-15 July 2023	University of Technology Sarawak, Sibul, Sarawak
2	Co-Chair	8 <sup>th</sup> International Conference on Research Innovations (ICRI'23)	23-24 June 2023	Pasig, Metro Manila, Philippines
3	Teaching Staff	Staff Mobility for Erasmus+ Program: MARE-Marine Coastal and Delta Sustainability for Southeast Asia	May 22, 2023 to May 28, 2023	Estonian University of Life Sciences, Estonia
4	Prestigious Session Speaker	IN4OBE Global Virtual Summit 2022	14 August 2022	Zoom Session
5	Keynote speaker	Implementation Of Nutrition Education In Indonesia By Amerta Students	9 August 2022	Universitas Airlangga
6	Invited Speaker	7th International Conference on Research Innovations (iCRI-22)	11 Nov 2022	SEAMEO RECSAM
7	Invited speaker	European Alliance for Innovation-International Conference on Social Sciences (EAI-ICONESS)	19 July 2021	Universitas Muhammadiyah Purwokerto, Indonesia
8	Speaker	Early Childhood Education Webinar (i-Leap Programme)	10 July 2021	Penerbitan Pelangi Sdn Bhd
9	Invited Speaker	Industry in the Classroom of Marine Science Program	31 May 2021	Faculty of Science and Marine Environment, Universiti Malaysia Terengganu
10	Speaker	Program of UTM Online Global Classroom (OGC) Computational Thinking for Problem Solving	19 November 2020.	Universiti Teknologi Malaysia, Johor, Malaysia
11	Co-Chair	5th International Conference on Management, Engineering, Science, Social Science and Humanities (iCon-MESSH'20)	14-15 August 2020	SEAMEO RECSAM
12	Speaker	Preschool Seminar on Nurturing Higher Order Thinking Skills Among Preschoolers	14 March 2020	Universitas Pelita Harapan, Medan, Indonesia

13	Speaker	Preschool Seminar on Playing Is A Serious Learning Matter	22 February 2020	Sekolah Kalam Kudus, Batam, Indonesia
14	Speaker	Preschool Seminar on Playing Is A Serious Learning Matter	18 January 2020	Fabu Hotel, Bandung, Indonesia
15	Speaker	Preschool Seminar on Playing Is A Serious Learning Matter	14 December 2019	Whiz Prime Hotel, Makassar, Indonesia
16	Guest Lecture Speaker	STEM-5Es	13 December 2019	Universitas Negeri Makassar, Makassar, Indonesia
17	Workshop Speaker	Effective application of the STEM 5Es in Play-based Approach	13 December 2019	Universitas Negeri Makassar, Makassar, Indonesia
18	Speaker	ASEAN Student Forum	27-30 August 2019	Universiti Teknologi Petronas
19	Speaker	RCE Iskandar Sustainable & Low Carbon Schools Exhibition 2019	15 July 2019	AEON Mall Bukit Indah, Johor Bahru
20	Keynote Speaker	International Conference on Science, Technology, Engineering and Mathematics Education Forum	25 <sup>th</sup> April 2019	Universitas Muhammadiyah Purwokerto, Purwokerto, Indonesia
21	Speaker	Johor International Messenger of Peace Forum and 1 <sup>st</sup> Scouts Science Technology Engineering Mathematics Camporee	12-15 April 2019.	SMK Tasek Utara, Johor
22	Chair	Special Session Computational Thinking Speaker for 2nd International Conference on Science, Technology, engineering and Mathematics Education 201	2-3 October 2018.	Sunway Putra Hotel, Kuala Lumpur, Malaysia
23	Speaker	2nd International Conference on Science, Technology, engineering and Mathematics Education	2 October 2018	Sunway Putra Hotel, Kuala Lumpur, Malaysia
24	Speaker	1st International Conference on Creativity and Innovative Technology in Education	24-25 July 2018	Le Grandeur Palm Resort Johor
25	Chairperson (Parallel Session)	1st International Conference on Creativity and Innovative Technology in Education 2018	24-25 July 2018.	Le Grandeur Palm Resort Johor
26	Speaker	Academic Visit Program 2018 Universitas Negeri Surabaya	7-16 January 2018	Universiti Teknologi Malaysia, Johor, Malaysia
27	Speaker	Internship Program 2018 Universitas Hamzanwadi 2018	21 March-4 April 2018	Universiti Teknologi Malaysia, Johor, Malaysia

28	Invited Speaker	STEAM Special Session at 7 <sup>th</sup> World Engineering Education Forum (WEEF) 2017	13-17 November 2017	<b>Berjaya Times Square Hotel</b> , Kuala Lumpur, Malaysia
29	Invited Speaker	International Sit-In Program for Pyu delegation	24th July-2nd August 2017	Universiti Teknologi Malaysia, Johor, Malaysia
30	Invited Speaker	Computational Thinking 4.0 for STEM Day in conjunction with Iskandar Learning Festival 2017	20 July 2017	UniKL MITEC, Johor
31	Speaker	Johor Sustainable and Low Carbon Schools Exhibition 2016	20 February 2016	Dewan Sultan Iskandar, UTM, Johor.
32	Keynote Speaker	Second Annual International Seminar on Trends in Science and Science Education	12-13 November 2015	Faculty of Mathematics and Natural Sciences, University of Medan in Medan, North Sumatera, Indonesia
29	Plenary Speaker	Seminar on STEM Education for 21 <sup>st</sup> Century Skills	14 – 15 May 2015	SEAMEO RECSAM, Penang

## WORKSHOP CONDUCTED

### International Level

1.	<b>INTERNATIONAL ONLINE TRAINING ON TEACHING SCIENCE AND MATH: COMPUTATIONAL THINKING FOR PROBLEM SOLVING (CT4PS)</b>	
	Organiser	: Southeast Asian Institute of Educational Training, Inc.
	Participant	: Science and Mathematics Teachers, Philipines
	Date	: 29 July 2023
	Venue	: Zoom online platform
2.	<b>WORKSHOP ON COMPUTATIONAL THINKING IN SCIENCE LEARNING</b>	
	Organiser	: International Collaboration Program For Experiential Learning And Competency – Based Education Landscape (I-EXCEL 2023)
	Participant	: Universitas Islam Negeri Walisongo Semarang, Indonesia
	Date	: 10 May 2023
	Venue	: Meeting Room, FSSH, UTM
3.	<b>WORKSHOP ON COMPUTATIONAL THINKING AS A PROFESSIONAL TEACHER'S SKILL IN LEARNING IN THE FOURTH INDUSTRIAL REVOLUTION AND SOCIETY 5.0</b>	
	Organiser	: Universitas Riau, Indonesia

	Participant	: Pre-service teachers
	Date	: 14 March 2023
	Venue	: Education Campus, Rumbai, Indonesia
<b>4. WORKSHOP ON COMPUTATIONAL THINKING IN STEM EDUCATION</b>		
	Organiser	: Universitas Islam Negeri Sultan Syarif Kasim (UIN SUSKA), Riau
	Participant	: Pre-service teachers
	Date	:15 March 2023
	Venue	: Jabatan Tarbiah dan Keguruan, UIN SUSKA
<b>5. WORKSHOP ON STEM AS A PROFESSIONAL TEACHER'S SKILL IN LEARNING IN THE REVOLUTION INDUSTRY 4.0 AND SOCIETY 5.0</b>		
	Organiser	: MI Al-Ikhwan
	Participant	: Teachers
	Date	: 15 March 2023
	Venue	: MI Al-Ikhwan
<b>6. WORKSHOP ON TEACHING PORTFOLIO PART 2</b>		
	Organiser	: CEE UTM
	Participant	: Universitas Sebelas Maret (UNS) & Universitas Diponegoro (UNDIP), Indonesia
	Date	: 16 December 2022
	Venue	: Webex online platform
<b>7. WORKSHOP ON SCHOLARSHIP OF TEACHING AND LEARNING (SOTL) PART 1</b>		
	Organiser	: CEE UTM
	Participant	: UNS & UNDIP, Indonesia
	Date	: 22 October 2022
	Venue	: Webex online platform
<b>8. WORKSHOP ON HYPOTHETICAL CREATIVE REASONING USING MYGAMBOT</b>		
	Organiser	: Universitas Negeri Medan (UNIMED)

	Participant	: UNIMED Lecturer and Students
	Date	: 2 – 3 August 2022
	Venue	: Fakultas Matematika dan Ilmu Pengetahuan Alam (FMIPA, UNIMED).
<b>9.</b>	<b>WORKSHOP ON HYPOTHETICAL CREATIVE REASONING USING MYGAMBOT</b>	
	Organiser	: SMP An Nizam, Medan
	Participant	: SMP AN NIZAM Teachers and Students
	Date	: 4 August 2022
	Venue	: Dewan, SMP An Nizam
<b>10.</b>	<b>WORKSHOP ON TEACHING PORTFOLIO PART 1</b>	
	Organiser	: CEE UTM
	Participant	: UNS & UNDIP, Indonesia
	Date	: 4 June 2022
	Venue	: Webex online platform
<b>11.</b>	<b>WORKSHOP ON SCHOLARSHIP OF TEACHING AND LEARNING (SOTL) PART 1</b>	
	Organiser	: CEE UTM
	Participant	: UNS & UNDIP, Indonesia
	Date	: 21 May 2022
	Venue	: Webex online platform
<b>12.</b>	<b>WORKSHOP ON SCIENCE ASSESSMENT IN THE 21ST CENTURY: ENHANCING STEM SKILLS &amp; SCIENCE PROCESS SKILLS</b>	
	Organiser	: Schools Division Office Of Tabaco City, Phiippines
	Participant	: Secondary Science School Teachers
	Date	: 9 August 2022
	Venue	: Zoom online platform
<b>13.</b>	<b>WORKSHOP ON INTEGRATION OF MYGAMBOT FOR INQUIRY BASED LEARNING</b>	
	Organiser	: SEAMEO RECSAM, Pulau Pinang
	Participant	: Teachers and Educators

	Date	: 18 May 2022
	Venue	: Computer Lab 1, SEAMEO RECSAM, Pulau Pinang
<b>14. WORKSHOP ON HYPOTHETICO CREATIVE REASONING USING GAMBOT FOR PRE-SERVICE TEACHER</b>		
	Organiser	: Universitas Riau (UNRI)
	Participant	: Undergraduate and postgraduate students
	Date	: 22 June 2022
	Venue	: Fakultas Pendidikan, UNRI
<b>15. WORKSHOP ON HYPOTHETICO CREATIVE REASONING USING GAMBOT FOR SCHOOL STUDENTS</b>		
	Organiser	: Universitas Riau (UNRI) dan SMPN 1 Mempura Siak, Indonesia
	Participant	: Students of SMPN 1 Mempura Siak
	Date	: 23Jun 2022
	Venue	: SMPN 1 Mempura Siak
<b>16. WORKSHOP ON HYPOTHETICO CREATIVE REASONING USING GAMBOT FOR LECTURERS</b>		
	Organiser	: Universitas Riau (UNRI), Indonesia
	Participant	: Lecturers of UNRI
	Date	: 24 June 2022
	Venue	: Fakultas Pendidikan, UNRI
<b>17. WORKSHOP ON COMPUTATIONAL THINKING</b>		
	Organiser	: Universitas Riau (UNRI), Indonesia
	Participant	: Undergraduate students of UNRI
	Date	: 24 June 2022
	Venue	: Hall, Fakultas Pendidikan, UNRI
<b>18. WORKSHOP ON COMPUTATIONAL THINKING FOR SOLVING PROBLEM IN EDUCATION</b>		
	Organiser	: Universitas Brawijaya, Indonesia
	Participant	: Students and Lecturers
	Date	: 17 September 2021

	Venue	: Zoom online platform
<b>19. WORKSHOP ON STEAM 5E</b>		
	Organiser	: Faculty of Mathematics and Natural Sciences, Universitas Negeri Makassar, Makassar, Indonesia
	Participant	: Students and Lecturers
	Date	: 3 December 2019
	Venue	: Universitas Negeri Makassar
<b>20. WORKSHOP ON GAMIFICATION WITH COMPUTATIONAL THINKING AT 1ST INTERNATIONAL CONFERENCE ON CREATIVITY AND INNOVATIVE TECHNOLOGY IN EDUCATION</b>		
	Organiser	: FSSH, UTM
	Participant	: Conference participants
	Date	: 24-25 July 2018.
	Venue	: Le Grandeur Palm Resort Johor
<b>21. WORKSHOP ON STEM AND COMPUTATIONAL THINKING SKILLS AT THE 4TH INTERNATIONAL EDUCATION POSGRADUATE SEMINAR</b>		
	Organiser	: FSSH UTM
	Participant	: IEPS participants
	Date	: 10-11 December 2017
	Venue	: Le Grandeur Palm Resort, Johor
<b>22. WORKSHOP ON FUN WITH STEAM USING HANDHELD TECHNOLOGY AT THE INTERNATIONAL CONFERENCE ON EDUCATION AND HIGHER ORDER THINKING SKILLS 2016</b>		
	Organiser	: UTM AND PPSMJ
	Participant	: Conference participants
	Date	: 11-13 April 2016
	Venue	: Dewan Sultan Iskandar, UTM
<b>23. WORKSHOP ON CURRICULUM EDITING IN SCIENCE ACROSS THE WORLD (SAW)</b>		
	Organiser	: SEAMEO RECSAM,
	Participant	: SEAMEO Teachers

	Date	: 1-3 October 2014
	Venue	: SEAMEO RECSAM
<b>24. WORKSHOP ON SOUTHEAST ASIA REGIONAL STANDARDS FOR SCIENCE TEACHERS</b>		
	Organiser	: SEAMEO RECSAM
	Participant	: SEAMEO Science Teacher
	Date	: 20-22 January 2014
	Venue	: SEAMEO RECSAM
<b>25. MALAYSIA TORAY SCIENCE FOUNDATION (MTSF) EDITING WORKSHOP FOR SELECTED WINNING ENTRIES OF MTSF SCIENCE EDUCATION AWARD</b>		
	Organiser	: SEAMEO RECSAM
	Participant	: Lecturers and teachers
	Date	: 25-28 June 2012
	Venue	: SEAMEO RECSAM

#### University Level

<b>1. PROBLEM BASED LEARNING: EXPLORING THE TESDCP SYSTEM UNDER FREE@FS SHARING SESSION</b>		
	Organiser	: Faculty of Science
	Participant	: Lecturers
	Date	: 20 December 2022
	Venue	: Webex Online Platform
<b>2. WORKSHOP ON TRAINING OF TRAINERS FOR MODULE OF CREDIT CO-CURRICULUM COURSES &amp; SERVICE LEARNING</b>		
	Organiser	: Institute For Life-Ready Graduate (UTM iLeaGue), UTM
	Participant	: Co-Curriculum course instructors sem 1 session 2021/2022
	Date	: 6 October 2021
	Venue	: Webex Online Platform
<b>3. WORKSHOP ON PRGS PROPOSAL PREPARATION</b>		

	Organiser	: FSSH, UTM
	Participant	: Academic staffs
	Date	: 21 January 2021
	Venue	: Webex Online Platform
<b>4. WORKSHOP ON PRGS-ICC FSSH GRANT</b>		
	Organiser	: FSSH, UTM
	Participant	: Academic staffs
	Date	: 7 Oktober 2020
	Venue	: Webex Online Platform
<b>5. WORKSHOP ON PREPARATION OF PRGS 2.0 PROPOSAL 2020 FSSH</b>		
	Organiser	: FSSH, UTM
	Participant	: Academic staffs
	Date	: 19 May 2020
	Venue	: Webex Online Platform

### National Level

<b>1. WORKSHOP ON PRESENTATION SKILLS FOR THE YAYASAN PETRONAS CODING4ALL (YPC4A) MODUL 12 PROGRAM</b>		
	Organiser	: Petrosains
	Participant	: Form 2 students
	Date	: 17 Julai 2023
	Venue	: UTM Makerspace
<b>2. WORKSHOP ON HYPOTHETICO CREATIVE REASONING WITH MYGAMBOT</b>		
	Organiser	: SMK PUTERI AMPANG KUALA LUMPUR
	Participant	: Form 1-3 students
	Date	: 12 Julai 2023
	Venue	: Dewan Srikandi

3.	<b>WORKSHOP ON MATERIAL SCIENCE FOR MALAYSIA TECHLYMPICS 2022</b>	
	Organiser	: MOSTI and MRANTI
	Participant	: Malaysian youth
	Date	: 22 November 2022
	Venue	: Webex Online Platform
4.	<b>WORKSHOP ON HYPOTHETICO CREATIVE REASONING SKILLS</b>	
	Organiser	: FSSH, FKE, KMJ, PPSMJ
	Participant	: Kolej Matrikulasi Johor students
	Date	:28-29 Oktober 2022
	Venue	: KMJ
5.	<b>HANDS ON CODING WORKSHOP</b>	
	Organiser	: SMK Ulu Tiram
	Participant	: STEM Teachers
	Date	: 22 August 2022
	Venue	: Meeting Room, SMK Ulu Tiram
6.	<b>WORKSHOP ON STRENGTHENING 21ST CENTURY LEARNING (PAK21) THROUGH INQUIRY METHODS</b>	
	Organiser	: SMK Sungai Tiram
	Participant	: Secondary Teachers
	Date	: 30 March 2022
	Venue	: Surau At-Tasbih, SMK Sungai Tiram
7.	<b>WORKSHOP ON MARINE ENVIRONMENT SUSTAINABILITY AWARENESS</b>	
	Organiser	: Jabaran STEM, IPG Kampus Tuanku Bainun
	Participant	: Pre-service teachers
	Date	: 16 December 2021
	Venue	: Webex Online Platform
8.	<b>WORKSHOP ON AWARENESS OF MARINE AND COASTAL POLLUTION FOR ENVIRONMENTAL SUSTAINABILITY</b>	

	Organiser	: Universiti Malaysia Trengganu
	Participant	: Undergraduate students
	Date	: 2 May 2021
	Venue	: Webex
<b>9. COMPUTER SCIENCE BASIC COURSE</b>		
	Organiser	: UTM & MDEC
	Participant	: Secondary teachers
	Date	: 21-23 September 2020
	Venue	: Webex Online Platform
<b>10. WORKSHOP ON SCIENCE WIZARD AT THE STEAM CARNIVAL</b>		
	Organiser	: Perpustakaan Sultan Ismail (PSI)
	Participant	: School students
	Date	: 4 July 2018
	Venue	: PSI Cawangan Permas Jaya
<b>11. WORKSHOP ON CHEMISTRY IN ACTION AT THE RCE ISKANDAR SUSTAINABLE AND LOW CARBON SCHOOLS EXHIBITION</b>		
	Organiser	: CEE & RCE Iskandar
	Participant	: School students
	Date	: 8 Ogos 2018
	Venue	: Sutera Mall, Johor Bahru
<b>12. WORKSHOP ON STRENGTHENING TEACHING AND LEARNING FOR MATHEMATICS AND SCIENCE TEACHERS</b>		
	Organiser	: UTM DAN MRSM JOHOR BAHRU
	Participant	: MRSM teachers
	Date	: 4 January 2017
	Venue	: MRSM Johor Bahru
<b>13. BENGKEL PEMBANGUNAN ITEM PENILAIAN KOMPETENSI PEDAGOGI GURU STEM</b>		
	Organiser	: Kementerian Pendidikan Malaysia (KPM)

	Participant	: Pensyarah
	Date	: 8 September 2016
	Venue	: KPM, Putrajaya
<b>14. BENGKEL PEMBINAAN ITEM KBAT</b>		
	Organiser	: SMK(P) Sultan Abu Bakar
	Participant	: Guru-guru
	Date	: 25 Febuari 2016
	Venue	: SMKP SAB
<b>15. WORKSHOP ON LOW COST TEACHING TOOLS</b>		
	Organiser	: SMK SULTAN ISMAIL
	Participant	: Teachers
	Date	: 22 February 2016
	Venue	: Meeting room, SMKSI
<b>16. WORKSHOP ON HOTS ITEM IN MATHEMATICS T&amp;L</b>		
	Organiser	: SMK BANDAR PUTRA
	Participant	: Teachers
	Date	: 16 January 2016
	Venue	: SMK BANDAR PUTRA
<b>17. WORKSHOP ON PETROSAINS EDUCATORS: ELEMENT OF INQUIRY</b>		
	Organiser	: PETROSAINS & FSSH UTM
	Participant	: Science teachers
	Date	: 3-4 November 2015
	Venue	: Chemisry Education Laboratory, FSSH, UTM
<b>18. WORKSHOP ON LEARNING KIT</b>		
	Organiser	: Petrosains

	Participant	: Science Teachers
	Date	: 25 November 2015
	Venue	: SK Taman Kota Kulai 2, Kulai, Joho
<b>19. WORKSHOP ON FUNDAMENTALS OF INQUIRY</b>		
	Organiser	: Petrosains
	Participant	: Science Teachers
	Date	: SEAMEO RECSAM
	Venue	: 5-7 February 2014

#### JOURNAL EDITOR/ EDITORIAL/ ADVISOR PANEL/ REVIEW

NO	DATE	ROLE	JOURNAL/ CONFERENCE
1	1 Jan 2022 - present	Editorial Board	Learning Sains and Mathematics Journal
2	1 Jan 2022 - present	Editorial Board	Education, Sustainability & Society (ESS)
3	1 Jan 2022 - present	Editorial Board	Education & Learning in Developing Nations
4	1 Jan 2022 - present	Editorial Board	Journal Of Community Engagement Research For Sustainability
5	10 Jan 2022-1 Feb 2022	Editorial Board	PERTANIKA Journal Of Social Sciences & Humanities
6	1 Jan -31 Dec 2022	Editorial Board	Journal Of Teaching And Learning In Elementary Education
7	10 Jan 2023	Reviewer	ASM Science Journal
8	28 December 2022	Reviewer	PERTANIKA
9	29 November 2022-present	Reviewer	Eurasia Journal of Science, Mathematics and Technology Education
10	5 November 2022	Reviewer	Malaysian Journal of Mathematical Sciences
11	20 December 2021	Reviewer	Jurnal Sains Humanika

12	10 November 2021	Reviewer	COSMED 2021
13	3 August 2020	Reviewer	African Educational Research Journal
14	20 September 2020	Reviewer	VICUEL 2020
15	3 March 2020	Reviewer	RCEE 2020
16	17 November 2019	Reviewer	COSMED 2019
17	12 December 2019	Reviewer	TALE 2019
18	3 October 2018	Reviewer	International conference on STEM

## PROFESSIONAL SERVICES

### Consultation and Training

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION	TOTAL INCOME GENERATED (RM)
1.	Fasilitator	Kem Kecemerlang STEM	27/07/2023-28/07/2023	SMK Pengerang Utama	5000.00
2.	Trainer	Online Global Classroom	19/11/2021	UTM JB	1085.00
3.	Consultation	Computational Thinking With Ardiuno Starter Kit During Computational Thinking Special Session In ICSTEM 2018	04/10/2018	UTM	2680.00
4.	Consultation	1ST International STEAM Conference Education In Conjunction With WEEF	01/12/2018	UTM	82000.00
5.	Consultation	Developing Computational Thinking Through Graphic Calculator In Steam Education	12/12/2018	PULAU PINANG	1800.00
6.	Consultation	Karnival Inovasi STEM	14/11/2018	SMK SULTAN ISMAIL	1700.00

7.	Consultation	Kembara Stem UTM-JPNJ	10/10/2018	UTM	5000.00
8.	Consultation	Karnival STEM	18/07/2018	SMK GELANG PATAH	1800.00
9.	Consultation	Pameran Berunsurkan STEM	11/07/2018	SK DANGA	250.00
10.	Consultation	Work Process For Sit In Program Universitas Negeri Makasar	30/06/2018	UTM	30800
11.	Consultation	Computational Thinking Special Session In Conjunction With International Conference On STEM Education	01/01/2018- 03/10/2018	UTM	5000.00
12.	Consultation	International Conference On Creative And Innovative Technology In Education	24/07/2018- 25/07/2018	UTM	82000
13.	Trainer	Training Of Trainers In Student Centred Learning And Outcome Based Education For Afghanistan Champions'.	09/10/2017	UTM-CEE	23050
14.	Consultation	Preschool Learning Programmes- English, Maths, Science	01/04/2017- 31/12/2017	UTM	30000.00
15.	Trainer	Training Of Trainers For SCL Part 2: Team-Based Learning Using Cooperative Learning Workshop	19/10/2017 -21/10/2017	UTM-CEE	27348

#### ENTREPRENUERSHIP

NO	SPIN OFF COMPANY (UTM)	TOTAL INCOME GENERATED (RM) (individual equity value based on audited company account in 3 years)
-	-	-

NO	1.HICOE management/agency 2. Board of Director or 3. Management for Corporattion EntitE	Average acquisition in 3 years.
----	---	---------------------------------

-	-	-
---	---	---

### Community Project

NO	ROLE	NAME OF PROJECT	DATE	TOTAL VALUE OF PROJECT (RM)
1.	Project Leader	CHEM-it for MSN 2023	19/08/2023	RM300.00
2.	Project Leader	Malaysian Brain Craft Challenge (MBC2) for MSN 2023	19/08/2023 – 20/08/2023	RM1000.00
3.	Project Leader	Malaysian Brain Craft Challenge (MBC2) for MSN2022	1/10/2022 – 31/12/2022	RM1700.00
4.	Project Leader	Homelessness Management Information System (Homie) (Social Work-End Homelessness)	1/10/2019 – 31/12/2019	RM4000.00
5.	Project Leader	Visible the Invisible	15/08/2018 – 15/11/2018	RM8000.00
6.	Project Leader	Feeds Hunger Feeds Hope	25/10/2018-26/10/2018	RM5000.00
7.	Project Leader	Karnival Kelab Suka Belajar	07/05/2017-07/05/2017	RM10000.00
8.	Project Leader	UTM-SBA Holiday Program	16/12/2017-17/12/2017	RM1560.00
9.	Project Member	Eksplorasi STEM UTM-JPNJ Peringkat Negeri Johor	21/05/2017-21/05/2017	RM5000.00
10.	Project Member	Pembelajaran Abad Ke 21 di SMK Masai2	1/03/2016 – 30/09/2016	RM10000.00
11.	Project Member	Program STEM Day	18/3/2019	RM2000.00

### Community and University Services

NO	ROLE	TITLE OF PROGRAMME	DATE	LEVEL	LOCATION
1	Trainer	Modul 12:Presentation Skills Program Yayasan Petronas Coding4all (YPC4A) Bersama Petrosains	17 July 2023	State	UTM Makerspace

2	External Examiner	Pemeriksaan Pemeriksa Luar (EE) Bagi PDPP	4-5 April 2023	National	IPG Kampus Sultan Mizan, Besut, Terengganu
3	External Examiner	Pemeriksaan Pemeriksa Luar (EE) Bagi PDPP	14-15 September 2022	National	IPG Kampus Sultan Abdul Halim
4	Judge	Techlympic Inovasi Masa Depan	6 August 2022	National	Universiti Southtampton
5	Webinar moderator	PPSMJ Webinar From guided inquiry to open inquiry for 21st-century learning	25 November 2020	International	Universiti Teknologi Malaysia
6	Student Supervisor	International Teaching Practice Program of Universitas Negeri Yogyakarta	3-30 September 2018	International	Universiti Teknologi Malaysia
7	Student Supervisor	International Community Service and Field Teaching Practice Program of Universitas Negeri Malang	3-26 September 2018	International	Universiti Teknologi Malaysia
8	Student Supervisor	International Teaching Practice Program of Universitas Negeri Makassar	1 April-28 April 2018.	International	Universiti Teknologi Malaysia
9	Student Supervisor	the International Teaching Practice Program of Universitas Muhammadiyah Palu	17 February-17 March 2018.	International	Universiti Teknologi Malaysia
10	Student Supervisor	International Teaching Practice Program of Universitas Muhammadiyah Purwokerto	18 February-17 March 2018	International	Universiti Teknologi Malaysia
11	Judge	Karnival Inovasi Teknologi Hijau Peringkat Kebangsaan 2018	20-23 November 2018	National	Pulai Springs Resort, Johor
12	Judge	1st Innovative Practices in education Expo 2018	3 October 2018	International	Sunway Putra Hotel, Kuala Lumpur
13	Modul Leader	National Science Challenge 2018, Prime Minister's Challenge Trophy	18 December 2018	National	Universiti Teknologi Malaysia

		Semi Final			
14	Facilitator	MyTeacher Module National Science Challenge 2018, Prime Minister's Challenge Trophy Semi Final	18 December 2018	National	Universiti Teknologi Malaysia
15	Parellel Workshop Moderator	National Colloquium of STEM Educators	12 November 2016	National	Universiti Teknologi Malaysia
16	Item Development Panel	Competency Assessment Pedagogical Skills in STEM MOE 2016	8 September 2016	National	Putrajaya
17	Coordinator	Khidmat Masyarakat Program	19 November 2019.	State	Zoo Johor
18	Facilitator	Pertandingan Kembara STEM Sekolah Menengah In conjunction with Gerakan Dekad Bahasa Kebangsaan 2019	14 October 2019	State	AEON Mall Bandar Dato' Onn, Johor
19	Program Director	Scratchtopia Challenge Johor State Level	13 June 2019.	State	Dewan Akumni, Universiti Teknologi Malaysia
20	Jury	Scratchtopia Challenge Johor State Level	13 June 2019.	State	Dewan Akumni, Universiti Teknologi Malaysia
21	Facilitator	Carnival STEMorphosis	20 February 2019	State	Kolej Matrikulasi Kejuruteraan Johor
22	Manuscript evaluator	Manuscript of Contributing Factors to TIMSS Grade 8 Students Science Achievement: A Comparative Study Between Malaysia and Singapore	5 March 2019	National	Universiti Teknologi Malaysia
23	Judge	RCE Iskandar Sustainable & Low Carbon Schools Exhibition 2018	8 August 2018	State	Sutera Mall, Johor Bahru
24	Trainer	STEAM trainer and Education Program for ILEAP	18 July 2019	State	Universiti Teknologi Malaysia
25	Trainer	EteMs Trainer for Chemistry subject for Larut, Matang & Selama District, Perak	2004-2005	District	PPD, LMS

NO	NAME OF ENDOWMENT AND WAKAF	TOTAL CONTRIBUTION (RM)
1	UTM INTERNATIONAL SIT IN	51000.00
2	STEM INTEREST-IGNITION PROGRAM	10000.00
3	TABUNG ENDOWMEN UTM (RM10x12mth)	120.00

#### Commercialisation

NO	ROLE	NAME OF PRODUCT COMMERCIALISATION	DATE	TOTAL INCOME GENERATED (RM)
1.	-		-	-

#### Grant Based On Innovation And University Commercialisation Product

BIL	NAME OF GRANT	ROLE	CATEGORY OF GRANT(UTM/OTHERS)	TYPE OF GRANT	AMOUNT (RM)	STARTING DATE	ENDING DATE	VOTE NO
-	-	-	-	-	-	-	-	-

#### Patent Granted And Filing

NO	NAME OF PATENT	STATUS OF PATENT	FILING NO.
-	-	-	-

#### Trademark

NO	NAME OF TRADEMARK	STATUS OF TRADEMARK	FILING NO.
1.	MYGAMBOT	Certified	TM2022016210 (Class 9)
2.	MYGAMBOT	Certified	TM2022016209 (Class 16)

#### Copyright

#### Main Inventor

NO	NAME OF COPYRIGHT	STATUS OF COPYRIGHT	FILING NO.
1	GamBot (Educational Game Mobile Robot)	Approved	LY2022J03167
2	Work Process of Scratchtopia Challenge	Approved	IP/CR/00395
3	Scratchtopia Challenge: From Science Experiments to Coding	Approved	LY2020006367
4	Two-tier multiple choice diagnostic test	Approved	LY2020005405
5	Modified version of Lawson Classroom Reasoning Test for Malaysian Students.	Approved	LY2020005424

#### Co-Inventor

NO	NAME OF COPYRIGHT	STATUS OF COPYRIGHT	Filing No.
1	Module - Design Thinking for IR4.0 Professionals	Approved	LY2022J06278
2	3D Geometry AR Applications in Geometry	Approved	LY2022J06241
3	Attract Box	Approved	LY2022J03181
4	KCA-Kit Celik Ayat	Approved	LY2022J03180
5	Speclusive Digraph Carpet	Approved	LY2022J03182
6	YISTEM A- An acronym for questionnaire of Young Innovators Program on STEM's competency, interest and career among mentor.	Approved	LY2019002185
7	Research Instruments Of The Use Of Bar Model In Enhancing The Learning Of Problem-Solving In Mathematical Operations Among Year Three Students.	Approved	LY2020005405
8	Two-tier multiple choice diagnostic test	Approved	LY2020005405
9	YISTEM B-An acronym for questionnaire of Young Innovators Program on STEM's interest, career and characteristics among mentee.	Approved	LY2018006207.
10	Modul Pengurusan Trauma Bagi Mangsa Banjir.	Approved	LY2017001953
11	Modul Pendidikan Bagi Mangsa Banjir	Approved	IP/CR/2016/1579
12	Modul Pembangunan Kemahiran Insaniah Bagi Mangsa Banjir	Approved	IP/CR/2016/1575