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UniMAP RESEARCH ASSESSMENT
(UniRA) 2019

Tips on How to Write Review Article

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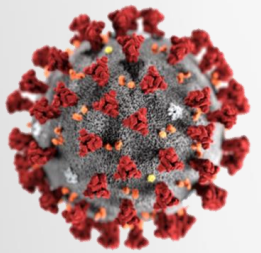

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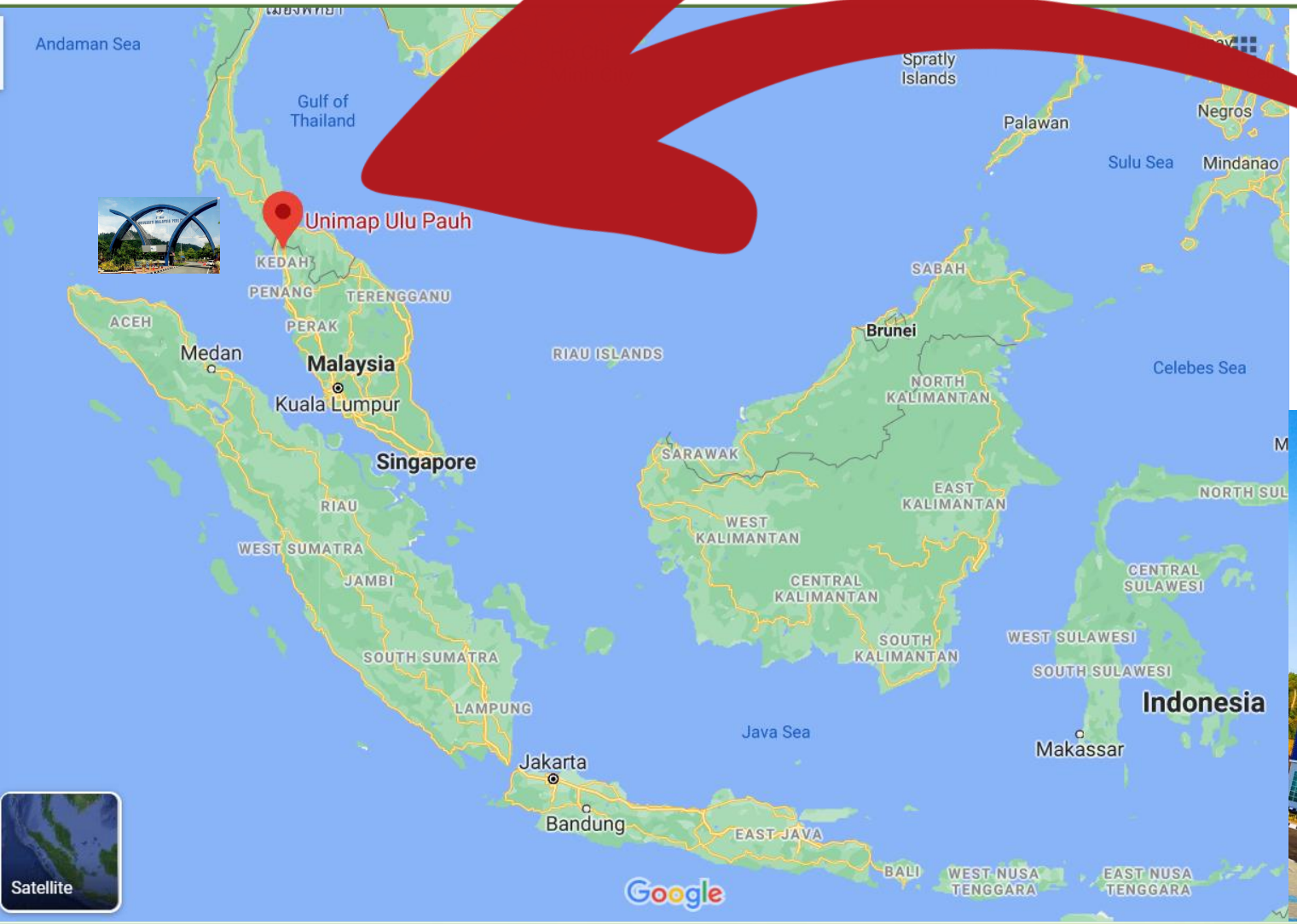

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The Official Website

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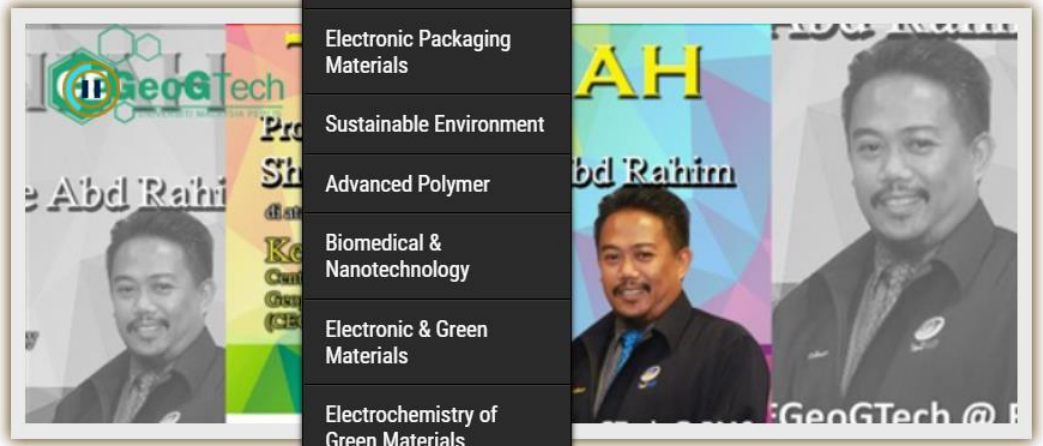
- Electronic & Green Materials
- Electrochemistry of Green Materials
- Green Ceramic

ECH



GALLERY POWERED BY CI

CeGeoGTech was established in July 2011 and located at School of Materials Engineering, Universiti Malaysia Perlis (UniMAP). UniMAP is Malaysia's 17th public institution of higher learning. It was approved by the Malaysian Cabinet on May 2001. Originally known as Kolej Universiti Kejuruteraan

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LATEST NEWS

- Prof. Emeritus Datuk Dr. Kamarudin Hussin received "Outstanding Scientist" Award
- Shamala Ramasamy won 3rd Place in Malaysian 3 Minute Thesis Competition.
- The Electronic and Green Materials (EGM 2016) International Conference, 01-02 May 2016, Phuket, Thailand
- The 2nd International Conference on


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2021
LIST OF CONFERENCE CEGeoGTech
(IConTVET 2021)
International Conference on Technical and Vocational Education and Training
Date : 04 February 2021
Website : https://icontvet.weebly.com/
(IConGETech 2021)
3rd International Conference on Green Engineering & Technology
Date : 04 February 2021
Website : https://icongetech.weebly.com/
3
(ICONMET 2021)
International Conference on Manufacturing Engineering Technology
Date : 01 April 2021
Website : https://iconmet.weebly.com/
4
(ICMProTech 2021)
International Conference on Material Processing & Technology
Date : July 2021
Website : https://icmprotech.weebly.com/
5
(IConGEET 2021)
3rd International Conference on Green Environmental Engineering and Technology
Date : July 2021
Website : https://icongeet.weebly.com/
6
(IConGDM 2020)
6th International Conference on Green Design and Manufacture
Date : September 2021
Website : https://icongdm.unimap.edu.my/
7
(ICAMET 2021)
International Conference on Advanced Materials Engineering & Technology
Date : November 2021
Website : https://icamet.unimap.edu.my/
8
(ICDISST 2021)
International Conference on Design Innovation, Social Science & Technology
Date : November 2021
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9
(ICEAM 2021)
International Conference on Electronic and Advanced Materials
Date : November 2021
Website : https://iceam.unimap.edu.my/
10
(EGM 2021)
5th Electronics and Green Materials International Conference
Date : November 2021
Website : http://iconegm.unimap.edu.my/
11
(ICoGMPAC 2021)
1st International Conference on Green Materials, Processing & Characterization
Date : Disember 2021
Website : https://icogmpac.unimap.edu.my/
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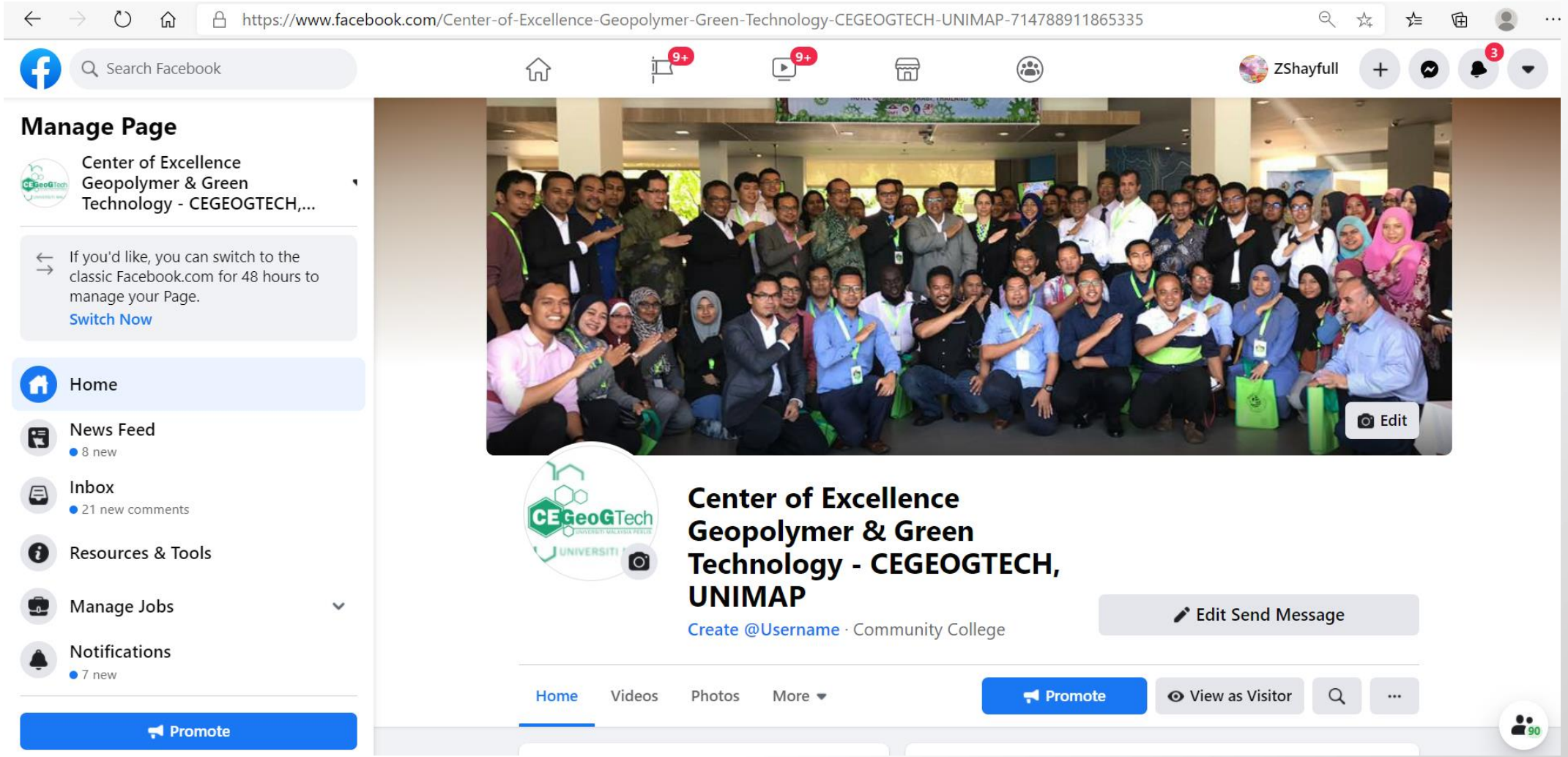
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21 new comments
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Manage Jobs
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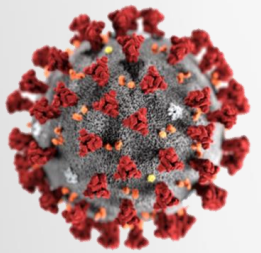

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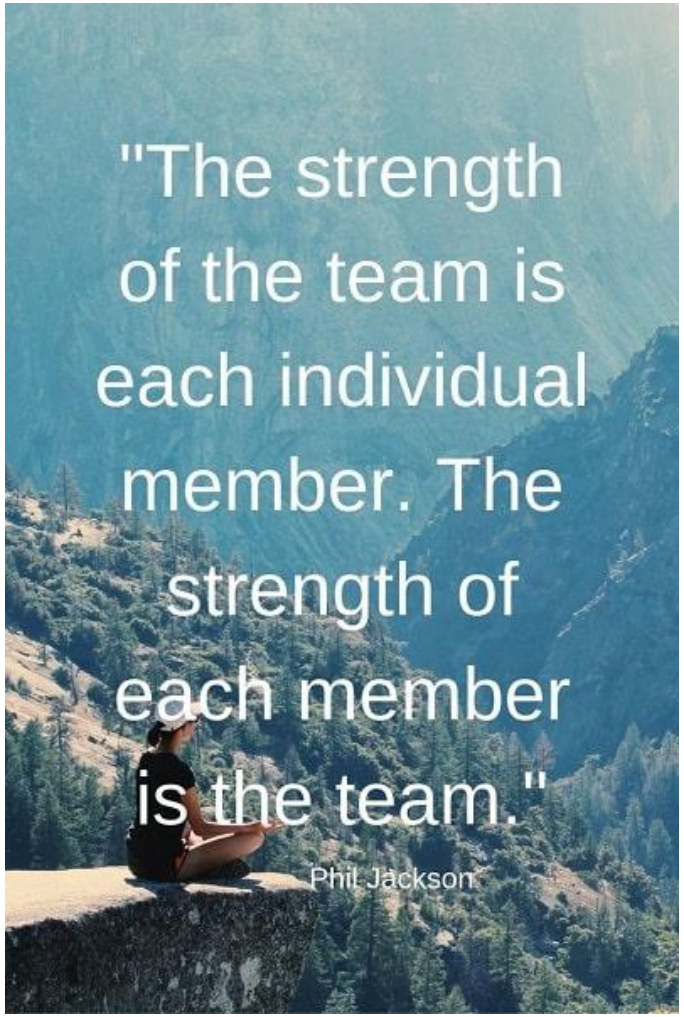


"Teamwork: Simply stated, it is less me and more we."

"Alone we can do so little; together we can do much." – Helen keller

"Individually we are one drop. Together, we are an ocean."

"Teamwork divides the task and double the success."

"If everyone is moving forward together, then success takes care of itself."-Henry Ford

"Unity is strength…when there is teamwork and collaboration, wonderful things can be achieved."

"Every team needs a hero, every hero needs a team."

"Talent wins games, but teamwork and intelligence wins championships."

#frienships **#trust** **#respect**

#family **#mentoring**

RESEARCH

- **Success of research** is measured from the **outputs**

#Intellectual properties

#Scholarly Publications

#Other publications

#Citations

#H-index

#PhD/masters degrees

#Postgraduate students

#New/improved Products/Software/Process

#Innovation awards

#Networking

#Training programmes

#Services

WHY PUBLISH?

- ✓ Publication is **an important research output**.
- ✓ To **share knowledge** with the Science Community.
- ✓ To **assist PhD thesis/viva**.
- ✓ Publishing **increases** your **profile as a researcher**.
- ✓ Publication **lends credibility to your research**.
- ✓ Publication can **lead to future funding**.

WHY PUBLISH?

- ✓ If your research is **not published** in a journal **it does not exist**.
- ✓ It **must be possible to find it** !!

Prof Gustaf Olsson
Editor-in-Chief
Water Science & Technology

Main purpose of my presentation

- **To motivate** the audience **to publish** papers **in high in impact journals** & inspire to **become world class researchers**

LET'S GROWTH TOGETHER!!!

How many papers are you expected to publish during your PhD/masters programme?

At least THREE (3) Journal

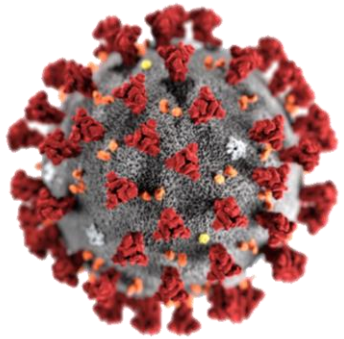
1. Review Article
2. Simulation/ Preliminary Analysis/Testing
3. Experimental Results

What is a review article?

- A **review article** is an **article** that summarizes the current state of understanding on a topic.
- A **review article** surveys and summarizes previously published studies, rather than reporting new facts or analysis.

Review Article → **Chapter 1 & Chapter 2 Thesis**

Utilize Time During COVID 19



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Review Article → **High Impact Journal**

What is the function of a review article?

- to **organize** literature
- **to evaluate** literature
- to **identify** patterns and trends in the literature
- to **synthesize** literature
- to **identify research gaps** and **recommend new research area**

Completed Chapter 1 & Chapter 2 Msc/PhD Thesis

What makes a poor literature review?

- A **Poor Literature Review** simply summarizes **research** findings **without critical evaluation**.
- A **Poor Literature Review** is **boring** or **obtuse** and **lack of organization**.
- A Good **Literature Review** **presents** **research** **evidence in a meaningful chronological order**.

Write the Tittle

Step 1: **Write** the Title. **Write** a title that reflects the main focus of your work. ...

Examples:

- **Potential of Conformal Cooling Channels in Rapid Heat Cycle Molding: A Review;** Advances in Polymer Technology, Wiley, IF:1.114, Q3.
- **Recent studies on optimisation method of Grey Wolf Optimiser (GWO): A review (2014–2017);** Artificial Intelligence Review, IF: 3.814, Q1.
- **Recent developments in fire retardant glass fibre reinforced epoxy composite and geopolymer as a potential fire-retardant material: A review;** Construction and Building materials, Elsevier, IF:4.419, Q1.
- **Potential of Metal Epoxy Composite (MEC) As Hybrid Mold Insert In Rapid Tooling Application: A Review;** Rapid Prototyping Journal, Emerald, IF:3.099, Q1
- **Geopolymer as Underwater Concreting Material: A Review;** Construction and Building materials, Elsevier, IF:4.419, Q1.

Write the Tittle

- The title must be **informative**:
  - ✓ The title has to **include important terms**.
  - ✓ It has to **indicate that the text is a review article**.
  - ✓ It may **include the message of the article**, **not just its coverage**.

Abstract

ABSTRACT: Rapid heat cycle molding (RHCM) can eliminate the weld line, increase flow length, and improve surface quality of the molded parts. However, the cycle time is much longer as compared to the conventional injection-molding process due to the time taken to heat up and cool down the mold. This paper reviews the applications of conformal cooling channels to reduce the cycle time in rapid and hard tooling for the conventional injection-molding process. The performance of conformal cooling channels in reducing the cycle time has been proven; however, the full potential of conformal cooling channels in RHCM is yet to be explored.
 Adv Polym Technol 2014, 33, 21381; View this article online at wileyonlinelibrary.com.
DOI 10.1002/adv.21381

- **Description of subjects covered without specific details.**
- **A descriptive abstract is like a table of contents in paragraph form.**

Abstract

ABSTRACT: Glass fibre reinforced epoxy composites have been used in building area (cold store construction), aeroplanes, land and water vehicles, etc., due to their high-specific rigidity and strength, high damping, great resistance to corrosion, and inferior thermal expansion. Unfortunately, epoxy is flammable whilst releasing a substantial amount of smoke and gases, and therefore presenting a possible risk to lives as well as property. The reduction of their fire risks is normally fulfilled by enhancing the fire performance of composite components including the incorporation of fire retardant (FR) into the polymer matrix and by providing protective FR coatings around the composite. To date, two types of FR have been incorporated into the composite system including additive and reactive FR to improve the fire performance of the composite. This review focuses on the research works over the last ten years in improving fire retardancy of glass fibre reinforced epoxy composite through the incorporation of both types of FR. This work also summarises research works regarding geopolymer which is applied on enhancing fire retardancy of epoxy-based material. Finally, this work presents some future research opportunities as regards to the potential of geopolymer to be utilised as one of FRs to improve fire retardancy of glass fibre reinforced epoxy composite.

Abstract

Abstract

Purpose: In recent years, rapid tooling (RT) and Additive Manufacturing (AM) technologies have been implemented in various aspects of the industry for rapid tooling with various kinds of prototype applications especially in the area of new product development. The purpose of this study is to analyze the current application trends of rapid tooling (RT) techniques in producing hybrid mold inserts.

Design/methodology/approach: The direct and indirect RT techniques will be discussed in this paper, aimed at developing a hybrid mold insert in increasing the speed of tooling development and performance. An extensive review of the suitable development approach of a hybrid mold insert, material preparation and the filler effect on physical and mechanical properties has been conducted.

Findings: Latest research indicates that it is possible to develop a hybrid material using the combination of different shapes/sizes of filler particles and it is expected to improve the compressive strength and thermal conductivity, and consequently the hybrid mold performance (cooling time and number of cycle) will be increased.

Research limitations/implications: The number of cases in RT for hybrid mold insert is still lacking as compared to the conventional manufacturing technology. One of the significant limitations is on the ways to improve physical and mechanical properties due to the limited type, size and shape of materials currently available.

Originality/value: This review presents the information and highlights current gaps related to this field of study. In addition, it appraises the new formulation of Metal epoxy composite materials for the hybrid mold insert in injection molding application and rapid tooling for non-metal products.

Abstract

Abstract. Underwater concrete is one of the special types of high-performance concrete in the current industry. It performs well at least in strength, workability, service life and is presumed to have a bright future, as long as there is the need to construct bridges, dams and structures with underwater foundation. A new material called geopolymer is now widely promoted for its ability to replace ordinary Portland cement (OPC) as a binder due to its green technology. Numerous researches have established that the geopolymer has comparable strength and chemical resistivity compared to OPC. There is, however, a scarcity of research based on geopolymer as an underwater concreting material. Contrasting from typical concrete, underwater concreting requires different method and properties of concrete to ensure the successful implementation of underwater concrete. Therefore, this paper is intended to review the current knowledge on the properties of geopolymer when exposed to seawater and its potential to be used for underwater concreting.

Introduction

1) Subject background. The general topic, issue, or area of concern is given to illustrate the context.

2) "Problem". Trends, new perspectives, gaps, conflicts, or a single problem is indicated.

3) Motivation/justification. The author's reason for reviewing the literature, the approach and the organisation of the text are described.

Introduction in Review Article is Research Background & Problem statement in Chapter 1

Important!!!
Continuity from one section to another section

End of Introduction Section

This review focuses on the previous research works on the fabrication of fire retarded glass fibre reinforced epoxy (FR glass/epoxy) composite through the enhancement of fire performance of composite components, therefore the technique via preparation of protective FR coating around the composite will not be discussed in this paper. Besides, the related work on enhancing the fire performance of reinforcing agents will not be further reviewed since glass fibre will be the main focus of this review. This is due to the fact that glass fibre is chemically inert in the fire, sustained physical as well as chemical stability at high heat fluxes and elevated temperature [15], and stayed unchanged by the fire until 830 °C for E-glass and 1050 °C for S-glass types [7]. Besides, the effectiveness of additive and reactive FR on the thermal as well as mechanical properties of the composite are also summarised. Furthermore, research works regarding geopolymer which is applied to enhancing fire retardancy of epoxy-based material are summarised. Finally, the gaps found in the previous literature has been proposed as future research opportunities. The next sections discuss the test methods that are widely employed to measure fire retardancy of polymeric materials.

Summarized like summary in Chapter 2 Thesis

Important!!! Continuity from one section to another section

Structure/Body Article

Examples

ABSTRACT	1. Introduction
Introduction	2. Fire retardancy test methods
Injection-Molding Process	2.1. Cone calorimeter
Rapid Heating Cycle Molding Technology	2.2. Underwriters' Laboratory (UL) 94 test
Cooling Channels Influencing Cooling Time and Cycle Time	2.3. Limiting oxygen index (LOI) test
Summary and Future Works	3. Approach of improving fire retardancy of glass fiber rei…
Acknowledgments	3.1. Incorporation of additive fire retardant compound
References	3.2. Incorporation of reactive fire retardant compound
	3.3. Incorporation of both additive and reactive fire retar…
	4. Incorporating geopolymer into epoxy-based material
	4.1. Epoxy resin
	4.2. Epoxy layered silicates nanocomposite
	4.3. Glass/epoxy composite
	5. Geopolymer as matrices
	6. Summary and future works
	Declaration of Competing Interest
	Acknowledgements
	References

Structure/Body Article

Example

Contents

Structure/Body Article

- Cover **one idea**, aspect or topic **per paragraph**.
- **Avoid referring to only one** research per paragraph; consider several studies per paragraph instead.
- **Link** the studies to one another. **Compare and discuss** these relationships. Use connecting words.
- **Summarize and conclude** every section

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

➢ WORDS THAT ADD INFORMATION:

In addition

Another reason

Besides that

Furthermore

Also

Moreover

For example

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

- **WORDS THAT SHOW CONCLUSION:**

Finally

For example

To conclude

In conclusion

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

- **WORDS THAT REPEAT INFORMATION:**

To repeat

In fact

In other words

To put it another way

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

➢ WORDS THAT SHOW COMPARISON:

Similarly

Like

Likewise

By comparison

In comparison

Compared to

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

➢ WORDS THAT SHOW CONTRASTS OR DIFFERENCES:

Nevertheless	Though	but
unlike	Although	yet
However	Nonetheless	in contrast to
rather than	In spite of	

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

➢ WORDS THAT SHOW A TIME RELATIONSHIP:

Finally

The beginning

While

Even when

Next

Meanwhile

Eventually

At first

Looking beyond

Following

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

- **WORDS THAT LIMIT OR PREPARE FOR AN EXAMPLE:**

For example

To illustrate

For instance

such as

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

- **WORDS THAT SHOW CAUSE (EXPLAIN WHY):**

because

caused by

Because

because of

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

- **WORDS THAT SHOW EFFECT/RESULT:**

thus	**That is why**
as a result	**So for that reason**
therefore	
Consequently	

Smooth transition between sentences

GUIDE TO TRANSITION WORDS AND SENTENCE SAMPLES

- **WORDS THAT ASSERT OBVIOUS TRUTH OR GRANT OPPOSITION:**

There is no doubt

without a doubt

Of course

Naturally

Certainly

Granted that

Conceding that

Smooth transition between sentences

Structure/Body Article

Table Journal Summary

Explain each journal, maybe with the helps of figure/table from previous researchers

Critic

Structure/Body Article

Examples

ABSTRACT

Introduction

Injection-Molding Process

Rapid Heating Cycle Molding Technology

Cooling Channels Influencing Cooling Time and Cycle Time

Summary and Future Works

Acknowledgments

References

1. Introduction
2. Fire retardancy test methods
   - 2.1. Cone calorimeter
   - 2.2. Underwriters' Laboratory (UL) 94 test
   - 2.3. Limiting oxygen index (LOI) test
3. Approach of improving fire retardancy of glass fiber rei…
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   - 3.3. Incorporation of both additive and reactive fire retar…
4. Incorporating geopolymer into epoxy-based material
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   - 4.3. Glass/epoxy composite
5. Geopolymer as matrices
6. Summary and future works

Declaration of Competing Interest

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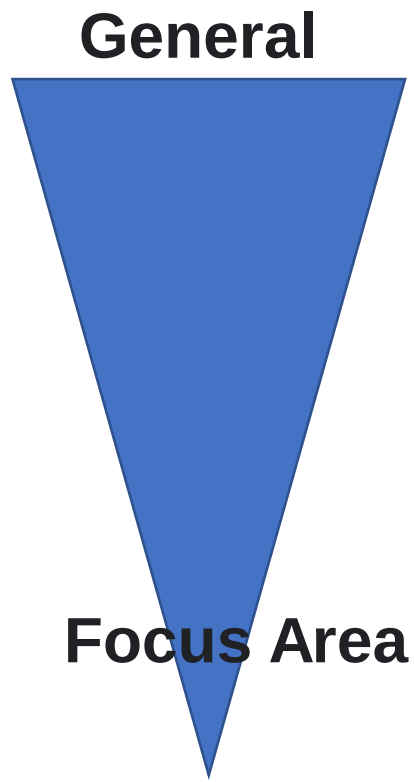

Summary Previous Researches

Table Journal Summary

TABLE I
Research on Rapid Heating Cycle Molding

No.	Researcher	Type of Cooling/ Heating Channel	Type of Plastic Component	Plastic Material Used	Parameters Setting	Type of Coolant used	Type of Heating Element Used	Material for Mold Insert	Type of Analysis		Results
									Simulation	Experiment	
1.	Chen et al.[29]	Combination induction heating and cooling channels	A steel plate and double gated tensile specimen	ABS	Heating stage 110 –180°C, and 110–200°C Cooling stage 180 –110°C, 200–110°C, Mold temperature 50°C	Coolant, 12°C	Induction coil spiral shape	AISI 4130	Y – ANSYS	Y	Heating time, 3–4 s for center plate to raise from 110 to 180°C or 200°C and 21 s to return to 110°C.
2.	Chen et al.[7]	*Cooling channels: Not specified *Heating: multiple-turn spiral coil	Rectangular plate	PC	Mold temperature 60/160°C, Melt temperature 300°C, Injection flow rate 90 cm^3/s	Cooling water	Electromagnetic induction heating	Not specified	N	Y	Heating time, 11 s to raise the mold temperature from 60°C to 160°C, cooling time, 188 s. Surface roughness improve approximately 80% at a mold temperature 180°C compared at a mold temperature of 60°C.

Summary Previous Researches

Chen et al.[29] introduced the combination of electromagnetic induction heating with low coolant temperature, 50°C applied to a double gated tensile specimen mold. Figure 3 shows the multiple-turn coil in spiral shape and cooling channels with a diameter 10 mm used in injection mold. The effects of the temperature variation on surface quality and strength of the weld line were compared to the parts molded without induction heating. Analysis Software (ANSYS) was used to simulate the thermal distribution of induction heating. From the investigation, the time taken to heat the mold surface temperature from 110 to 180°C and 110 to 200°C was only 3–4 s. However, the cooling time from 200 to 110°C was 21 s. For the acrylonitrile butadiene styrene (ABS) tensile test parts, the increasing of mold temperature led to the eliminating weld lines on the surface of the molded parts as well as increased the strength of weld line regardless of the heat applied either on the core or cavity side.

Critic

Summary Previous Researches

Park et al.[4] investigated the induction coil in an elliptic design as shown in Fig. 8 to heat the mold insert for a mobile phone cover with multiple holes. Moldflow software was used to pre-dict the weld lines position. The maximum temperature of mold insert was 143°C achieved in 3 s, whereas the temperature of a mold plate was lower than 60°C. The heating rate was 40°C/s with variation of heating time from 3–5 s. The depth of the weld lines was compared at the mold temperature 100, 110, and 120°C. From the results, it was found that the depth and width of weld lines decrease as the mold temperature increased. However, the weld lines cannot be eliminated due to the maximum temper-ature on the mold surface was 120°C, which was below than the glass transition temperature for polycarbonate (PC) material (140 ° C). The maximum temperatures of mold insert was 143 ° C only at around the induction coil.

Critic

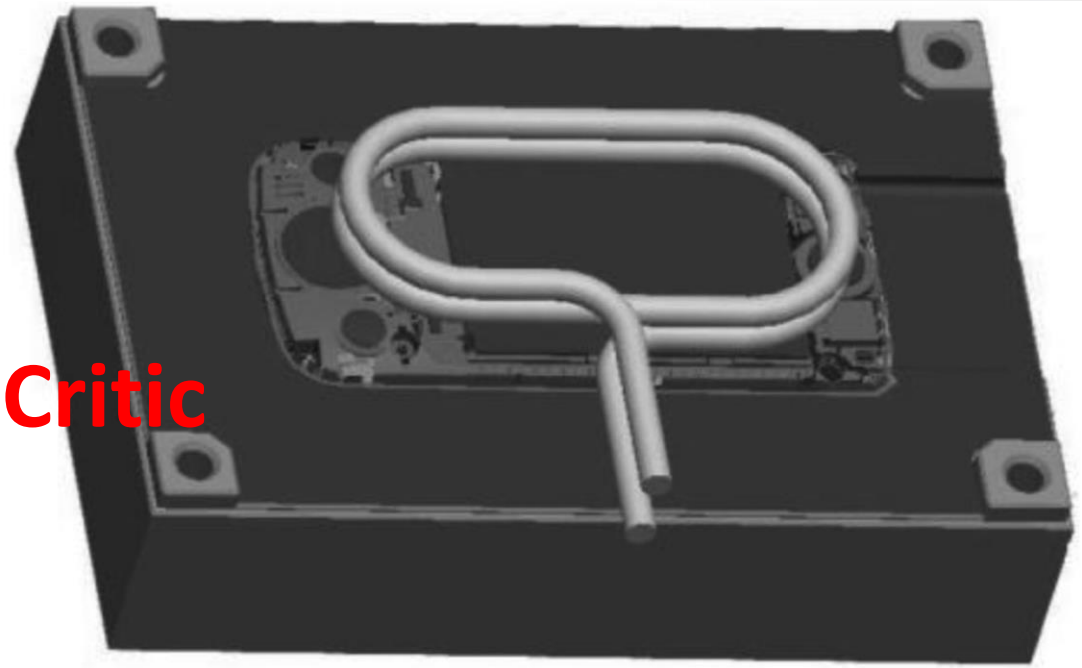

FIGURE 8. An elliptically turned induction coil to heat the mold surface.[4]

Summarized Critic at The End of Section

This review highlights the proven potential of RHCM in eliminating weld line problems, increasing flow length, and improving surface quality of the molded parts. The main differences between conventional injection moldings and RHCM are in RHCM the mold is heated and cooled rapidly to ejection temperature after the filling process was completed. The mold is usually heated to above the glass transition temperature of molten plastic used to get the optimum result of surface quality on the molded parts. Various types of heating methods are used in RHCM to heat the mold in the shortest time. From this review, the use of thin metal layer coated on the mold surface as to heat the mold is not practical due to difficulty in coating the complex parts as well as parts with tiny sections. Besides, for the part finished by texturing or sand blasting on the mold surface, the coating will affect the surface roughness on the molded parts produced. Besides that, using induction heating as a heating element will cause another issue due to the high frequency pro-

Most researchers tried to optimize the design of cooling channels to improve the efficiency and effectiveness of conventional cooling systems for the injection-molding process.[14,39] However, it was limited to a simple design involving straight drilled holes of cooling channels because of the technology limitation in mold fabrication.[40] Baffles, bubblers, and thermal pins are alternative devices used to cool small regions or areas which are far from the main cooling channels. However, this solution sometime is not effective especially for large/medium sizes with a free-form surface of mold due to high-pressure drop in the cooling channels system.[41,42] To overcome this problem, researchers have introduced conformal cooling channels which are designed to follow the shape of the products. With this type of cooling channel, the distance between the cooling channels and the wall of cavities is constant and the thermal distribution is more uniform.

Critic at The End of Journal Summary

Ferreira and Mateus[55] introduced innovative approaches that are integration of RP and rapid tooling technologies with composite materials cooled by conformal cooling channels. The finite element analysis (FEA) software, C-Mold, was used to simulate the filling of parts to be molded, the pressure drop at flow front, temperatures and cooling time, filling time, air traps, and weld line regions. Four types of materials were used as mold insert, which were EP250, Neukadur VGSP5, EPO 752, and XD3533, and are casted into a frame as shown in Fig. 16 where the prototype and conformal cooling channel are placed in the appropriate position. The mold inserts produced from the casting process as shown in Fig. 17 were then assembled into the mold base for an injection-molding process. As a result, parts produced from this method had more uniform thermal distribution, good surface finish, and good accuracy except for parts molded from Neukadur VGSP5, which was poor in terms of surface finish and accuracy. However, these conformal cooling channels were capable of producing more uniform heat distribution thus improving the injection-molding cycle time and quality of molded parts.[63]

In the subsequent year, Hesami et al. [36] prepared FR glass/epoxy composite through hand lay-up technique by employing different FR such as carbon nanotube (CNT), montmorillonite (MMT), APP, and combination of CNT with APP (CNT/APP) and MMT (CNT/MMT). All FR composites have better LOI value compared to pristine composite with CNT/APP provided the greatest effect, followed by the CNT/MMT. This finding is consistent with Lim et al. [35] who discovered the LOI improvement after incorporating APP. The excellent synergism between phosphorus-based FR and CNT was due to the formation of the consolidated crack-free charred layer that decelerating the rate of degradation and enhancing the LOI value [51]. The excellent fire retardancy can be assured when the high level of nanodispersion is obtained [52]. Nonetheless, the effect of FRs utilised on mechanical properties still lack in this investigation.

Important!!!

Continuity from one section to another section

Summary and Future Works

The efficiency of RHCM in eliminating weld line problems and increasing surface glossy is discussed, and the efficiency of conformal cooling channels is also presented. The possibility of fabrication of the conformal cooling channels on hard tooling for the injection-molding process is also investigated. The efficiency and performance of conformal cooling channels in terms of uniform thermal distribution, reducing parts deflection, cooling time, and definitely injection molding cycle time is proven to be superior. This review highlights the remaining problems in RHCM that are the efficiency of a uniform thermal distribution during heating and cooling stages. Although from previous research, the time to heat the mold was proven shorter but the uniformity of thermal distribution was not taken into account that will actually influence the quality of plastic products ejected eventually. Most researchers focused on the method to heat the mold surface in RHCM, but no research was ever done in improving the cooling channels and heating layout to get the uniform thermal distribution as a nonuniform thermal distribution will cause longer cycle time, differential shrinkage, and warpage defects on the molded parts.[33] Figure 38 indicates a fish bone diagram summarizing all factors that influence cycle time in RHCM. It is understood that the factors that highly influence on cycle time is the designs of cooling channels and heating elements that involve types of heating element, types of coolant, coolant controllers, mold insert materials, types of plastic resin used, and appropriate training and simulation software to enhance the knowledge of their workers to increase the productivity in RHCM.

Summary & Future Works

To overcome all of these issues, the conformal cooling channels system is recognized as one of the best solutions in reducing cycle time, differential shrinkage, and warpage defects on molded parts. However, the full potential of conformal cooling channels in RHCM is yet to be explored. Future studies should focus on the possibility of applying conformal cooling channels in RHCM, which have been proven by previous research in reducing the cooling time in rapid tooling and hard tooling for the injection-molding process. In addition, research were also not focused on how to remove the coolant after ejecting parts before another heating takes place on the mold insert again for the next cycle in RHCM. This issue is very crucial as a leaving coolant in the cooling channels will affect the thermal distribution on the next cycle thus the simulation results from the analysis will not be reliable anymore. The results from simulation should be in line with the experimental data as to understand the real problems during production. Previously, tensile specimen parts molded from RHCM also have been tested but no research ever been done on the shrinkage of molded parts from RHCM.

Kurt et al.[66] reported that the cavity pressure and mold surface temperature are strongly influenced the shrinkage of the molded parts in the conventional injection-molding process. Therefore, it is suggested that the accuracy of RHCM-molded parts should be evaluated using the BS EN ISO 294 or ASTM D955. Subsequently, the comparison should be done between the molded parts produced from RHCM and the conventional injection molding process in terms of the depth and length of the weld line, strength of the weld line, and replication of the mold surface for various types of common plastic materials used such as ABS, PC + ABS, PC, and PMMA. Thus engineers or mold designers can see clearly the advantages and disadvantages of using RHCM, and they can use this information as a guideline in selecting the best plastic materials to produce quality products. The research would also be more valuable and recognizable when benefited by industries.

References

 # > 100 Journals

#Try to avoid proceeding

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- Impact factor journal
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Reasons for Rejection

1. The paper does not fit the scope of the journal.
2. The paper does not contribute to new knowledge.
3. The paper does not meet established ethical standards.
4. The paper has been carelessly prepared.

Reasons for Rejection

5. The paper has methodological problems.

6. The number of experiment & amount of data was inadequate.

7. The language is poor.

8. The paper cannot compete with the high quality of other papers submitted to the journal.

9. Publication bias.

Responses to Reviewer

Responses to Reviewers Comments

Date: 24 Jan 2020

No.	Comment	Response
Reviewer #1		
1.	When using snapshot of numerical models, **it is recommended to remove the background in colour**	Has been changed as per request for Figures 2 and 8
2.	The discussion of methods and results, in general, should be possibly extended with some additional details.	Has been added accordingly. Please refer section 3 Results and Discussion (wording with blue color).
3.	Introduction: an improved comment on the cited references should be provided. Now, most of them are grouped all together. Are they all needed for the paper? Please revise	Has been revised accordingly. Please refer Section 1 Introduction (wording with blue color).
3.	Thirdly, section three, entitled "Results and Discussion", is the main section in which the processes to obtain numerical solutions are described. Furthermore, in order to visualize the temperature history at the surface of core-part interface some reference points are take into account. **Could be a good idea to compare with some experimental results by means of a thermal camera**.	Thanks for a good idea. This suggestion will be proceeded soon and in this manuscript, this suggestion has been added at Future Works. Please refer Section 4 Conclusions (wording with blue color).
4.	Finally, the conclusion section summarize the main findings of this research. In this section, it is **necessary to add some future research trends** in this field, and **some practical recommendations for the use of this numerical models in the industry**.	The conclusion has been added accordingly. Please refer Section 4 Conclusions (wording with blue color).

Responses to Reviewer

	(k) Line 275: "Table 4" should be "Table 3" (otherwise Table 4 is not in the proper place in the text).	Amended as proposed- after restructure manuscript Table 3 change to Table 4. Please refer: Section 2.4, Page 6, Line 245
	(l) Line 393: "*110oC*" should be "*110°C*"	Amended as proposed- All temperature units have been corrected (Please refer: Line 247, 393, 490, 411, 413)
	(m) Line 421: "*mold*" should be "*molds*".	Amended as proposed (Please refer Line 449)
	(n) Line 430: "*Figure 13*" should be "*Figure 12*"	This figure has been removed from manuscript
	(o) Line 432: Rework Figure 12 with larger font size and without the red underline below the word "mold".	This figure has been removed from manuscript
	(p) Line 451: "*For the future work will continue on*" should be "*The future work will continue with*".	This sentence has been corrected accordingly based on comments and suggestion from referee. Please refer: section 5, page 14, line 469
7	Finally, some specific corrections required which are mandatory before publication, have been identified are listed below:	Thanks for comments and suggestion. We have revised and improved the manuscript accordingly.
	(b) Once an acronym is presented, there is no need to reword it again. For example, RSM appears in full wording in Line 130. So, there is not a need to keep writing the full name in Lines 144, 242, 260 or 273.	Amended as proposed Please refer: line 153, 220, 238, 249.

Reasons for Rejection

10. Wrong choice of reviewers
11. The data have been poorly interpreted
12. The analysis is weak.
13. The literature review is inadequate or too long

Suggestion of Reviewer

1. Try to select from list of Editors
2. Analyze references (suggest authors – high citations)

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Tips on How to Write Review Article

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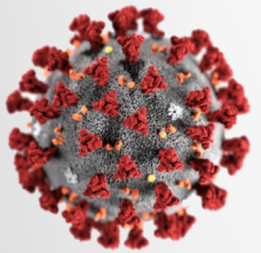

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