

## Editorial

**Tanimoto, Jun**

Interdisciplinary Graduate School of Engineering Sciences, Kyushu University : Professor

**Kyaw, Thu**

Department of Advanced Environmental Science and Engineering, Faculty of Engineering Sciences, Kyushu University : Associate Professor

**Rahmawati, Fitria**

Chemistry Department, FMIPA, Universitas Sebelas Maret

**Atmanto H Wibowo**

Chemistry Department, FMIPA, Universitas Sebelas Maret

他

<https://doi.org/10.5109/4068608>

---

出版情報 : Evergreen. 7 (3), pp. iii-viii, 2020-09. 九州大学グリーンテクノロジー研究教育センター  
バージョン :  
権利関係 :



## Editorial

The Spanish Flu (1918), SARS (2003), Swine Influenza (2009), and MERS (2013) illustrate the ongoing threat of worldwide pandemics that intermittently arise and jeopardize the safety and security of the modern social system and our daily lives. The COVID-19 pandemic has brought unparalleled experiences: locked-down cities, quarantines and social-isolation on a massive scale, economic downturn, enforced “social distancing,” collapse of medical systems, and more. We are writing this preface in the aftermath of COVID-19 without any optimistic forecast of when we may return to normal life. COVID-19 has taught us that the modern social system is vulnerable to unknown viruses with no available vaccines or treatments.

In the time of the pandemic, science and the so-called scientists are gaining extra attention thanks to the heavy promotion of most media outlets. Phrases like “Listen to the experts” and “Follow the advice of scientists” have been popularised starting with Greta Thunberg to government officials who are conducting daily coronavirus briefing using jumped-up, colourful graphs. The public is hearing varying guidance – “Two-metre is a safe distance”; “One metre is good enough”; “Face mask is a must”; “No mask no serve”; “The rule of six”; “Apply common sense” and to name a few. Such confusion triggers panic and mistrust among the public. Businesses and the global economy became the casualties of the lockdowns, which will have a profound and long-term impact, including the progress of science that requires huge financial supports from governments. The question is “Does science cause confusion?” or “Are the government scientists (celebrity scientists) too much data-centric and too much excited with the real-life experiments?” There is no such thing as “bad sciences”, but “bad scientists”. The world needs competent and capable scientists (not mediocre or below-average ones) to guide through the current pandemic, as well as for the success of every organisation. Meanwhile, initiations of “Green Environment” have been gaining momentum. For instance, we have Newsom’s order in California, the world’s fifth-largest economy, which aims “to phase out sales of new gas-powered cars by 2035” [1] and headlines like “China aims to cut its net carbon-dioxide emissions to zero by 2060” [2]. That’s encouraging for Green proponents like *Evergreen* – Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy. *Evergreen* sets another milestone with the publication of the current issue, i.e., Volume 7, Issue 03.

In this edition, we have ten original articles and selected articles from the 14<sup>th</sup> Joint Conference on Chemistry

(JCC2019) and the 6<sup>th</sup> International Conference and Exhibition on Sustainable Energy and Advanced Materials (ICE-SEAM) 2019. Articles touch subjects such as characteristics of the volcanic geothermal area, Type-I heterostructure and improved phase stability of formamidinium Lead Iodide Perovskite Grown on WS<sub>2</sub>, green human resource management, biomedical research, composite materials and artificial intelligence. We have an article on the case study of cognizance on pandemic coronavirus infectious disease (COVID-19) by using statistical technique. As usual, articles from *Evergreen* are diverse and assorted with multidisciplinary research from social science, basic science to applied science. Nevertheless, all articles keep an eye towards the Green Environment and Society, which is the scope and aim of *Evergreen*.

*Evergreen* recognises the contributions of our authors and reviewers. We further acknowledge the support of the editorial (including the guest editorial teams) board and the management committee. The more we publish, the busier our Secretary, Ms Mieko INOUE. We appreciate her effort. *Evergreen* wishes all be safe out there and enjoy reading the articles.

Jun Tanimoto (Editor-in-Chief)

Kyaw Thu (Executive Editor)

Evergreen - Joint Journal of Novel Carbon Resource Sciences & GreenAsia Strategy

---

Jun Tanimoto, Dr. Eng  
Professor  
Interdisciplinary Graduate School of Engineering Sciences,  
Kyushu University  
6-1 Kasuga-koen, Kasuga-shi, Fukuoka 816-8580, Japan

Kyaw Thu, Ph.D.  
Associate Professor  
Department of Advanced Environmental Science and Engineering,  
Faculty of Engineering Sciences, Kyushu University  
Kasuga-koen 6-1, Kasuga-shi, Fukuoka 816-8580, Japan

#### References

- [1] The Washington Post,  
<https://www.washingtonpost.com/climate-environment/2020/09/23/california-electric-cars/>
- [2] The Economist,  
<https://www.economist.com/china/2020/09/24/china-aims-to-cut-its-net-carbon-dioxide-emissions-to-zero-by-2060>

## Editorial from the Guest Editors of 14<sup>th</sup> JCC2019

Joint Conference on Chemistry is an annual conference organized by the consortium of Chemistry Department from five universities in Central Java, i.e., Universitas Diponegoro (UNDIP), Universitas Negeri Semarang (UNNES), Universitas Sebelas Maret (UNS), Universitas Jenderal Soedirman (UNSOED) and Universitas Kristen Satya Wacana (UKSW). Special series is 14<sup>th</sup> JCC2019 with the joint of Universiti Malaysia Sabah (UMS) as a guest consortium and guest committee.

Since 2014, JCC committee has run five international conferences in which 9<sup>th</sup> JCC-2014 was hosted by UNDIP, the 10<sup>th</sup> JCC-2015 by UNS, the 11<sup>th</sup> JCC-2016 by UNSOED, the 12<sup>th</sup> JCC-2017 by UNNES, the 13<sup>th</sup> JCC-2018 by UNDIP, and the 14<sup>th</sup> JCC-2019 hosted by UNS. The conference covers various topics in chemistry including electrochemistry, polymer chemistry, material chemistry, nanomaterial, medicinal chemistry, pharmaceutical chemistry, green chemistry, computational chemistry, natural-product chemistry, surface and interface chemistry, and also educational chemistry. 141 presenters have attended the 14<sup>th</sup> JCC-2019 from Indonesia, Malaysia, Japan, Korea, Turkey, Germany, and Spain. 5 articles of all submitted manuscripts have been selected to be proceed in Evergreen, in which 4 articles of original research in the theme of arc discharge nanoparticle synthesis, water-vapor adsorption from biomass waste, heavy metal adsorption, and ethanol quantification chemo sensor were finally accepted, whereas the rest of 1 article was declined.

All of the 14<sup>th</sup> JCC-2019 committee and guest editors in this special issue hope that the novelty findings of these published articles can contribute to science and technology development in the field of chemistry and also expresses gratitude to all of the consortia members for very nice cooperation and collaboration for this well-organized the 14<sup>th</sup> JCC conference. Editors also deeply thanks to all reviewers for positive comments and advices in contributing the quality of published articles. Finally, special gratitude was given to Chief Editor and the Editorial team of *EVERGREEN* Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy that gives opportunity to publish 14<sup>th</sup> JCC 2019 articles on the special issue of the Evergreen Journal.

Guest Editors

Dr. Fitria Rahmawati

Chemistry Department, FMIPA, Universitas Sebelas Maret, Jl. Ir Sutami 36 A Kentingan, Surakarta 57126

Dr.rer.nat Atmanto H Wibowo

Chemistry Department, FMIPA, Universitas Sebelas Maret, Jl. Ir Sutami 36 A Kentingan, Surakarta 57126

## **Editorial from the Guest Editors of ICE-SEAM 2019**

The 6<sup>th</sup> International Conference and Exhibition on Sustainable Energy and Advanced Materials (ICE-SEAM) 2019 was held on October 16 – 17, 2019, at the Swiss-Belinn Saripetojo in Surakarta, Indonesia. The ICE-SEAM 2019 is the 6th series of a biennial conference launched in 2009 and organized by the Mechanical Engineering Program, Universitas Sebelas Maret, Indonesia and the Faculty of Mechanical Engineering, Universiti Teknikal Malaysia Melaka. The event brings together researchers, scientists, and engineers from academia and industry to present and exchange ideas with a focus on the advancement of sustainable energy technologies supported by advanced materials technology. From 130 presented papers, 5 papers were invited for further review and 3 papers were finally selected for publication in Evergreen.

The first article presented the work on predicting the Particulate Matter (PM) reduction of diesel emulsion fuel by measuring the smoke opacity. The smoke opacity is known to be proportional to the PM quantity which directly leads to the emission. The use of emulsion fuel is believed to reduce PM emission which is more environmentally friendly. The second article presented the review on nanocellulose as binders to replace conventional polymers as binders in natural fiber-based composite materials. The use of nanocellulose is not just more environmentally friendly, but also more promising in terms of compatibility with the natural fibers in the composites. The last article discussed the characterization of the electrically conductive adhesive (ECA) filled with multiwalled carbon nanotube (MWCNT). The focus of the work is on the effect of chemical treatment and the results showed that the higher filler loading significantly improves the electrical conductivity of the ECA. The result is very prospective as the use of ECA could lead to the elimination of lead-based solder materials.

The guest editors in this special edition would like to express the utmost appreciation to the Green Asia Education Centre of Kyushu University as the publisher of Evergreen for the collaboration, especially to the Editor in Chief for the patience and understanding. We are also very thankful to the reviewers who have contributed to the manuscript through comments and advice. Additionally, we would also like to extend our gratitude to the authors, the conference committee and the management team to successfully publish this issue. We truly hope that this special issue of Evergreen will contribute to the advancement of scientific findings in the field

and provides new knowledge to the Evergreen readers.

**Guest Editors**

**Fitrian Imaduddin, Ph.D.**

Mechanical Engineering Program, Faculty of Engineering,  
Universitas Sebelas Maret, Surakarta 57126  
Indonesia

**Dr. Eng. Aditya Rio Prabowo**

Mechanical Engineering Program, Faculty of Engineering,  
Universitas Sebelas Maret, Surakarta 57126  
Indonesia

**Ubaidillah, Ph.D.**

Mechanical Engineering Program, Faculty of Engineering,  
Universitas Sebelas Maret, Surakarta 57126  
Indonesia

**Agung Tri Wijayanta, Ph.D.**

Mechanical Engineering Program, Faculty of Engineering,  
Universitas Sebelas Maret, Surakarta 57126  
Indonesia